

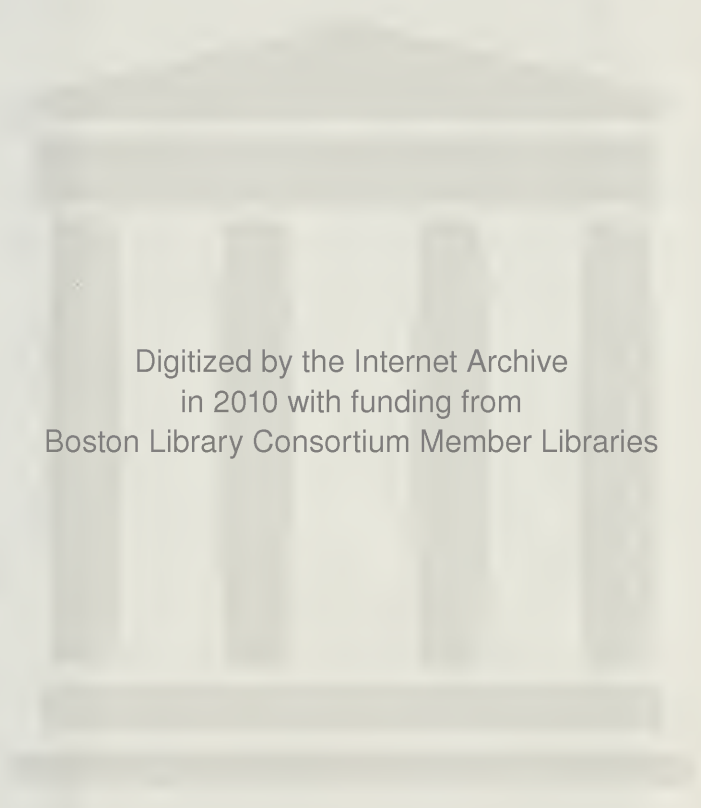
*

UMASS/AMHERST

*



312066 0285 1981 7



Digitized by the Internet Archive
in 2010 with funding from
Boston Library Consortium Member Libraries

COMPLIMENTS OF . .

BOARD OF RAILROAD COMMISSIONERS.

WALTER PERLEY HALL, CHAIRMAN,
GEORGE W. BISHOP,
CLINTON WHITE,

NO. 20 BEACON STREET,
BOSTON.

CHARLES E. MANN, CLERK.

Commonwealth of Massachusetts.

THIRTY-NINTH ANNUAL REPORT

OF THE

BOARD OF RAILROAD COMMISSIONERS.

JANUARY, 1908.



BOSTON:
WRIGHT & POTTER PRINTING CO., STATE PRINTERS,
18 POST OFFICE SQUARE.
1908.

APPROVED BY
THE STATE BOARD OF PUBLICATION.

THE STATE BOARD OF PUBLICATION
HAS APPROVED THIS BOOK FOR
USE IN THE SCHOOLS OF THE STATE

OF THE STATE OF NEW YORK
IN THE YEAR 1900

ALBANY: J. B. LIPPINCOTT & CO.
1900

Commonwealth of Massachusetts.

RAILROAD COMMISSIONERS.

WALTER PERLEY HALL, Fitchburg, *Chairman*, Term expires July 1, 1909.
GEORGE W. BISHOP, Newtonville, . . . Term expires July 1, 1910.
CLINTON WHITE, Melrose, . . . Term expires July 1, 1908.

CHARLES E. MANN, Malden, *Clerk*.
ALLAN BROOKS, Ayer, *Assistant Clerk*.
FRED E. JONES, Brookline, *Accountant*.
GEORGE F. SWAIN, Boston, *Engineer*.

RAILROAD INSPECTORS.

DANIEL M. WHEELER, Worcester, . . . Term expires October 1, 1909.
GRAFTON UPTON, Everett, . . . Term expires October 1, 1908.
JOHN Q. HENNIGAN, East Milton, . . . Term expires October 1, 1910.
LEWELLYN H. McLAIN, Melrose, . . . Term expires October 1, 1909.
WINFIELD L. LARRY, North Weymouth, . . . Term expires September 1, 1910.
HENRY W. SEWARD, Watertown, . . . Term expires December 1, 1910.
JOHN H. PARANT, Somerville, . . . Term expires January 1, 1911.

OFFICE, NO. 20 BEACON STREET, BOSTON.

INDEX.

- Abington, location, Old Colony, 247.
- Abolition of grade crossings (*see Grade Crossings*).
- Accidents on railroads, 25-32.
- at grade crossings, 30, 31.
 - ratio of, to number of crossings, 31.
 - general summary of, for the last year, 25-32.
 - investigation of, Somerville and West Deerfield, 225, 226.
 - number of personal injuries resulting from, 26.
 - to employees, 26-29.
 - to passengers, 26-28.
 - ratio of, to total number carried, 28.
 - to trespassers, 26, 32.
- Accidents on street railways, 51, 52.
- comparison of, in 1906 and 1907, 52.
 - circular as to, 226, 227.
 - investigation of, Charlton, 224, 225.
 - Springfield, 226, 227.
 - tabulation of, for the last year, 52.
- (For accidents returned by each company see columns 92-98 of tabulations, pp. 384-387.)
- Accommodations, fares, service, reports and orders as to, 71-92.
- stations (*see Stations*).
- Acton, street railway express, Concord, Maynard and Hudson, 159.
- Additions to property, street railway, see columns 15-19 in tabulated returns, pp. 340-343.
- Agawam, alteration of crossing, Central New England, Clinton White, commissioner, 220.
- Alteration of crossings (*see Crossings*).
- American Trust Company, approval as trustee under mortgage, Boston and Northern, 126, 127.
- Amherst and Sunderland street railway, purchase by Holyoke, 143.
- (See also returns.)
 - (*See Holyoke.*)
- Amount of business (*see Volume of Traffic*).
- Annual returns, railroad, tabulation of, for the last year, 297-329.
- comparative and summary statements from, 325-329.
 - comparison of returns for years 1906 and 1907, 326, 327.
 - summary of returns for years 1901 to 1907, 328, 329.
- Annual returns, street railway, tabulation of, for the last year, 331-379.
- Andover, bridge over Boston and Maine, on Boston and Northern, approval of plan, 122.
- location, Boston and Northern, 241.

- Application of proceeds, stock and bond issues, approval of, West End, 139.
- Arlington, location, West End, 249.
transfers, at Harvard square, Cambridge, Boston Elevated, 81.
- Ashland, crossing protection, Boston and Albany, 188.
street railway express, South Middlesex, 170.
- Ashton Valve Company, private railroad, Cambridge, 183.
- Assets and liabilities of railroad corporations, 7-10.
of street railway companies, 43, 44.
(See also comparison, 1906-1907, pp. 326, 327; from 1901-1907, pp. 328, 329.)
- Athol and Orange street railway, communication to bank commissioner concerning, 294.
(See also returns.)
- Attleborough Branch railroad (see returns).
- Attleborough, alterations of crossings, New York, New Haven and Hartford, 209-213.
joint use of tracks, Interstate Consolidated and Norton and Taunton, 229.
Taunton and Pawtucket and Norton and Taunton, 230.
Taunton and Pawtucket and Interstate Consolidated, 231.
locations, Interstate Consolidated, 244.
Norton and Taunton, 247.
Taunton and Pawtucket, 248, 249.
operation, Interstate Consolidated, 264.
Norton and Taunton, 266.
Taunton and Pawtucket, 268.
street railway express, Interstate Consolidated, 160.
- Auction sale of stock, Springfield and Eastern, 138.
Old Colony, 134.
West End, 139, 140.
- Automatic safeguards for electric cars, 174-176.
- Avon, street railway express, Old Colony, 168, 169.
- Baggage and freight transportation, street railway (*see Express, Street Railway*).
- Baggage cars, number of, 24.
- Baggage charge, John B. Ratigan, New York, New Haven and Hartford, Falmouth, 80.
- Bank Commissioner of the Commonwealth, communication to, as to street railway companies earning five per cent dividends, 294.
- Barnstable, abolition of crossing, Old Colony, report as special commission, 193-197.
certificate, 202, 203.
- Barstow's Wakefield, Melrose and Boston express, service, Boston and Maine, 154.
- Becket, laying out of highway across Chester and Becket, consent refused, 179.
- Belcher, R. E., crossing protection, Boston and Albany, Ashland, 188.
- Belmont, change of grade, Boston and Maine, Fitchburg, 192. 193.
crossing abolition, Boston and Maine, Fitchburg, 203.
- Berkshire railroad, alteration of crossing, Pittsfield, 217-219.
(See also returns.)

- Berkshire street railway, express transportation, Cheshire, 156, 157.
extension of time for crossing, Pittsfield, 181.
locations, Egremont, 241, 254.
Great Barrington, 241, 254.
Pittsfield, 241.
Sheffield, 241, 254.
operation, Williamstown, 262.
stock, 123.
(See also returns.)
- Beverly, locations, Boston and Northern, 241.
operation, Boston and Northern, 262.
- Bishop, George W., designation on commission, alteration of crossing, Chelmsford, 220.
Maynard, 220.
- Blackstone, abolition of crossing, New England, report as special commission, 198-201.
certificate, 203, 204.
- Blake and Knowles Steam Pump Works, private railroad, Cambridge, 183, 184.
- Block signals, railroad, approval of, Boston, Revere Beach and Lynn, 118.
Boston and Albany, 118.
Boston and Maine, 118.
Boston Terminal Company, 119.
New York, New Haven and Hartford, 119.
discussion as to, 60-63.
- Blue Hill street railway, express transportation, Stoughton, 157.
(See also returns.)
- Board of Railroad Commissioners, organization of, iii.
expenses of, 296.
- Boilers, locomotive, testing of, 257; 258.
- Bonds, railroad, amount of, 9, 10.
approval of issues of, 39.
Boston and Lowell, 125.
Nantucket Central, 133.
refunding of, Chatham, 129.
- Bonds, street railway, amount of, 44-46.
application of proceeds, West End, 139.
issues of, 54.
Boston Elevated, 123, 124.
Boston and Northern, 127.
Boston and Worcester, 128.
Citizens Electric (modification of order), 129.
Concord, Maynard and Hudson, 130.
Gardner, Westminster and Fitchburg, 131.
Lowell and Fitchburg, 132.
Old Colony, 135.
Pittsfield Electric, 136.
Uxbridge and Blackstone, 138.
Worcester Consolidated, 141.
communication to bank commissioner as to investments in, by savings banks, 294.

- Boston, abolition of crossings, New York, New Haven and Hartford, Old Colony, Dorchester, 204, 205.
 approval of plans, Boston Elevated, footbridge, Commercial street, 121.
 siding, Washington street, 236, 237.
 shelters, City square and Thompson square, Charlestown, 274-276.
 stations, Dudley street, changes, 277.
 Forest Hills, special report, 272-274.
 changes at, 275.
 structure, Washington street, 237.
 storage yard, Charlestown, 277.
 change of grade, Old Colony, Dorchester, 192.
 extension of time for crossing, New York, New Haven and Hartford, West End, Dorchester, 182.
 joint use of tracks, Boston Elevated, Boston and Northern, East Boston, 228.
 locations, Boston and Revere Electric, 243.
 Boston Elevated, 235, 236.
 West End, 249-252.
 notice of petition for crossing abolition, Old Colony, Dorchester, 208.
 operation, West End, 269.
 street railway express, Boston Elevated, special report to legislature, 155, 156.
 service, Boston Elevated, East Boston, 83, 84.
 East Boston tunnel, 84, 85.
 stations, Boston Elevated, City square and Thompson square, changes, 274-276.
 Broadway (dismissed), 274.
 Dudley street, changes, 277.
 Forest Hills, special report, 272, 273.
 approval of plan, 273, 274.
 transfers, Boston Elevated, Atlantic avenue, 82.
 Harvard square, 81.
 Scollay square, 81, 82.
 passengers carried to, Boston and Albany, 312.
 Boston and Maine, 312.
 Boston, Revere Beach and Lynn, 312.
 New York, New Haven and Hartford, 316.
 passengers carried from, Boston and Albany, 312.
 Boston and Maine, 312.
 Boston, Revere Beach and Lynn, 312.
 New York, New Haven and Hartford, 316.
 Boston, Cape Cod and New York canal, relocation of Old Colony tracks, Bourne, 232, 233.
 extension of time for, 233.
 report of joint board as to, 286-291.
 Boston, Clinton and Fitchburg railroad, exchange of stock for Old Colony stock, 134.
 Boston Elevated railway, approval of plans, Cambridge subway, report, 235, 236.
 Dudley street, changes, 277.
 East Cambridge extension, 236.
 Washington street, Boston, siding, 236, 237.

- Boston Elevated railway, approval of plans, footbridge, Commercial street, 121.
 - Forest Hills station, 272-274.
 - changes at stations, 275.
 - communication to bank commissioner concerning, 294.
 - issue of bonds, 123, 124.
- express transportation by, special report, 155, 156.
- joint use of tracks, Boston and Northern, East Boston, 228.
- locations, Cambridge subway, 235, 236.
 - East Cambridge extension, 236.
- service, East Boston, 83, 84.
 - East Boston tunnel, 84, 85.
 - Malden, 85.
- siding, Boston, Washington street, 236, 237.
- stations, changes in structure, 275.
 - Broadway, 274.
 - City square and Thompson square, 274-276.
 - Cambridge subway, 235, 236.
 - Dudley street, changes, 277.
 - Forest Hills, 272-274.
 - Sullivan square, 277.
- storage yard, Charlestown, 277.
- transfers, Atlantic avenue, 82.
 - Harvard square, 81.
 - Scollay square, 81, 82.
- (See also returns.)
- (*See also West End.*)
- Boston, Lowell and Lawrence electric railroad, certificate of exigency (refused), 148-153.
- Boston, Revere Beach and Lynn railroad, block signals, approval of, 118.
 - Sunday trains, 281.
 - passengers carried to Boston, 312.
 - carried from Boston, 312.
- (See also returns.)
- relocation of station, Point of Pines, Revere, 278.
- spark arrester, approval of, 259.
- Boston, Revere Beach and Lynn Railroad Relief Association, approval of amendments to by-laws, 294.
- Boston Terminal Company, approval of interlocking signal system, 119.
- Boston and Albany railroad, abolition of crossing, Worcester, 207, 208.
 - block signals, approval of, 118.
 - extension of time for crossing, Pittsfield, 181.
 - fire extinguishers, 177, 178.
 - operating contract, Providence, Webster and Springfield, 228.
 - service, discussion, 65.
 - special reports, 71-77.
 - spark arrester, approval of, 259.
 - special report to board, 93-117.
 - steam heating, exemption from, 221.
 - passengers carried to Boston, 312.
 - carried from Boston, 312.
 - protection at crossing, Ashland, 188.

- Boston and Albany railroad, Sunday trains, 281.
whistling, Framingham, 260.
(See also returns.)
- Boston and Eastern electric railroad, exigency, report, 148-153.
- Boston and Chelsea street railway (see returns).
- Boston and Lowell railroad, bonds, 125.
stock, 125, 126.
(See also returns.)
- Boston and Maine railroad, abolition of crossings, certificates, Belmont (Fitchburg), 203.
Fitchburg (Vermont and Massachusetts), 205, 206.
Greenfield (Connecticut River), 206.
Lynn, special report, 201, 202.
Rowley, 207.
- block signals, approval of, 118.
- bridges, approval of plan, Andover, 122.
height of, Medford, 120, 121.
Rowley, 121.
- change of grade, Belmont, 192, 193.
- crossing alteration, Maynard, designation of commissioner, 220.
- express service, Barstow's Express, 154.
T. A. Moynihan, 154.
- fire extinguishers, 177, 178.
- grade crossings, by Boston and Northern, Lowell, 180.
by Concord, Maynard and Hudson, Maynard, 181.
by Lowell and Fitchburg, Westford (emergency), 182.
- investigation of accidents upon, Somerville and West Deerfield, 225, 226.
- passengers carried to Boston, 312.
carried from Boston, 312.
- protection at crossings, Chicopee, 188, 189.
Peabody, 191.
- service, Winchester to Woburn, 78, 79.
Gloucester, 79, 80.
Milford branch, 78.
Rockport, 79, 80.
- spark arrester, approval of, 258.
- speed at Wilmington Junction, restrictions removed, 270.
- Sunday trains, 280-282.
- whistling, Reading, 260, 261.
Weston, 261.
(See also returns.)
- Boston and New York electric railroad, certificate of exigency (refused), 148-153.
- Boston and Northern street railway, approval of bridge plans, Andover, 122.
bonds, 127.
grade crossing, Lowell, 180.
joint use of tracks, Boston Elevated, East Boston, 228.
locations, Andover, 241.
Beverly, 241.
Chelsea, 241.
Everett, 241.

- Boston and Northern street railway, locations, Gloucester, 241.
Haverhill, 242.
Ipswich, 242.
Lawrence, 242.
Lowell, 242.
Lynn, 242.
Malden, 242
Marblehead, 242.
Methuen, 242.
Peabody, 242.
Reading, 242.
Rockport, 243.
Salem, 243.
Winchester, 243.
operation, Beverly, 262.
Chelsea, 262.
Everett, 262.
Haverhill, 263.
Ipswich, 263.
Lawrence, 263.
Lowell, 263.
Lynn, 263.
Malden, 263.
Salem, 263, 264.
Wakefield, 264.
service, Malden, 85.
West Newbury, 90, 91.
stock, 126.
trustee under mortgage, appointment of, 126, 127.
(See also returns.)
Boston and Providence railroad, alteration of crossings, Attleborough, 209-213.
Foxborough, 213-215.
(See also returns.)
Boston and Providence Interurban electric railroad, designation of newspapers,
advertisement of hearing on route, 234.
exigency, report, 148-153.
issue of certificate, 153.
Boston and Revere Electric street railway, location, Boston, 243.
Boston and Worcester street railway, bonds, 128.
express transportation, Framingham, Hudson, Marlborough, Natick,
Newton, Northborough, Shrewsbury, Southborough, Wellesley,
Westborough, 157, 158.
extension of time for crossing, Framingham, 180, 181.
joint use of tracks, Newton, Newton and Boston, in Newton, 229.
locations, Framingham, 239, 243.
Natick, 238, 239.
report, 237, 238.
* Southborough, 243.
operation, Framingham, 264.
stock, 127, 128.
(See also returns.)

- Bourne, extension of time for crossing, New Bedford and Onset, 179.
 relocation, Old Colony railroad, 232, 233.
 extension of time for, 233.
- Braintree, operation, Old Colony, 266.
 private railroad, extension of time, Fore River Ship Building Company, 185.
 street railway express, Old Colony, 168, 169.
- Bridge, Fall River-Somerset, report of special commission upon, 284-286.
- Bridges, railroad, report of bridge engineer on, 32-39.
 comparative lengths of wooden, stone and metal, 34.
 number and description of, on the several railroads, 33.
 work done on, by the several companies during 1907, 34, 35.
- Bridges, street railway, report of bridge engineer on, 52, 53.
 approvals of plans for, 121, 122.
- Bridges over railroad tracks, height of, Kingston, 120.
 Medford, 120, 121.
 Rowley, 121.
- Brimfield, approval of bridge plans, Springfield and Eastern, 122.
 operation, Springfield and Eastern, 268.
 street railway express, Springfield and Eastern, 171.
- Bristol and Norfolk street railway (see returns).
- Brockton, location, Old Colony, 247.
 operation, Old Colony, 266.
- Brockton and Plymouth street railway, stock, 128.
 express transportation, Whitman, Hanson and Pembroke, 158.
 (See also returns.)
- Buckland, location, Shelburne Falls and Colrain, 248.
- Business, amount of (*see Volume of Traffic*).
- By-laws, approval of amendments to, Boston, Revere Beach and Lynn Railroad Relief Association, 294.
- Cambridge, extension to East Cambridge, Boston Elevated, 236.
 locations, West End, 250, 251.
 private railroads, Blake and Knowles Steam Pump Works, 183, 184.
 New England Maple Syrup Company, and others, 183.
 Revere Sugar Refinery, 184.
 subway, Boston Elevated, approval of plans, 235, 236.
 transfers, Boston Elevated, Harvard square, 81.
 Scollay square, Boston, 81, 82.
- Cape Ann, residents of, service, Boston and Maine, 79, 80.
- Cape Cod canal, report of joint board, 286-291.
- Cape Ann Granite railroad (see returns).
- Capital, investment, street railways, per mile of track, 46, 47.
- Capital stock, railroads, amount and increase of, 10, 11, 39.
 (For capital stock of each company see tabulated returns, pp. 310-324.)
 approval of issue of, 39.
 Boston and Lowell, 125, 126.
 New York, Brockton and Boston Canal and Transportation, 133*, 134.
 Old Colony, 134.
 auction sale of, Old Colony, 134.
 in other companies, 7.
- Capital stock held in Massachusetts (*see tables*).

Capital stock, street railways, amount of, 45.

held in Massachusetts (see tabulated returns, column 91, pp. 380-383).

capital stock of each company (see column eight in tabulated returns, pp. 336-339).

approval of issues of, 54.

Berkshire, 123.

Boston and Northern, 126.

Boston and Worcester, 127, 128.

Brockton and Plymouth, 128.

Fitchburg and Leominster, 130.

Holyoke, 131.

Lowell and Fitchburg, 132.

Middlesex and Boston, 136.

Old Colony, 135.

Springfield, 137.

Springfield and Eastern, 137.

West End, 139, 140.

Worcester and Holden, 142.

Worcester and Southbridge, 142.

application of proceeds, West End, 139.

auction sale of, Springfield and Eastern, 138.

West End, 139, 140.

(*See also Consolidations.*)

Car heating, steam, exemption from, Boston and Albany, 221.

Central New England, 221.

electric, circular, 222.

hot water, Connecticut Valley, 222.

Fitchburg and Leominster, 223.

Lexington and Boston, 223.

Car lighting, circular, 293.

Car miles run, street railway, 49 (see also column 87, of tabulated statistics, pp. 380-383).

Cars, number owned (*see Equipment*).

cost of repairs (*see Repairs*).

equipment with fenders, discussion, 60.

report, 174-176.

with fire extinguishers, discussion, 58.

report, 177, 178.

with wheelguards, discussion, 60.

report, 174-176.

heating of, discussion, 58, 59.

locking doors, 226.

operation of, regulations, Pittsfield, 270.

street railway safety devices, circular, 174, 176.

tail lights, 226.

weight of, discussion, 39.

ventilation of, discussion, 58, 59.

(*See also Heating.*)

Carter's Ink Company, private railroad, Cambridge, 183.

Central New England railway, exemption from steam heating, 221.

designation of commissioner, alteration of crossing, Agawam, 220.

Central Vermont railway (*see New London Northern*).

- Certificates, approving locations, 235-254.
 of exigency, 153.
 preliminary to operation, 262-269.
- Change of grade of railroads, Boston and Maine, Fitchburg, Belmont, 192, 193.
 New England, Hyde Park, 193.
 Old Colony, Harrison Square, Boston, 192.
- Change of name, South Middlesex, to Middlesex and Boston, 136.
- Charlestown, shelters, City square and Thompson square stations, Boston
 Elevated, 274-276.
 storage yard, Boston elevated, 277.
- Charlton, report on accident, Worcester and Southbridge, 224, 225.
- Charter certificates (*see Compliance*).
- Chatham railroad, note, issue of, to refund outstanding bonds, 129.
 (See also returns.)
- Chelmsford, alteration of crossing, New York, New Haven and Hartford,
 George W. Bishop, commissioner, 220.
 location, Lowell and Fitchburg, 245.
 operation, Lowell and Fitchburg, 265.
- Chelsea, location, Boston and Northern, 241.
 operation, Boston and Northern, 262, 263.
- Cheshire, street railway express, Berkshire, 156, 157.
- Chester and Becket railroad, consent to highway crossing of, Becket, refused,
 179.
 (See also returns.)
- Chicopee, crossing protection, Boston and Maine, Page-Storms Drop Forge
 Company, 188, 189:
 location, Holyoke, 244.
- Circulars issued by board, railway, accidents, 226, 227.
 fenders, 174-176.
 heating, 222.
 wheelguards, 174-176.
 railroad, smoke from engines, 255-257.
 testing of locomotive boilers, 257, 258.
- Citizens Electric street railway, bonds (modification of order), 129.
 communication to bank commissioner concerning, 294.
 location, Newburyport, 244.
 operation, Newburyport, 264.
 service, West Newbury, 90, 91.
 (See also returns.)
- Citizens' Trade Association, East Boston, service, Boston Elevated, 83, 84.
- Clarke, W. B., and others, whistling, Weston, Boston and Maine, 261.
- Clyde Steamship Company, Sunday boats, 279.
- Collisions, railroad, number of, 29.
- Collisions (*see Accidents*).
- Common carriers (street railways) (*see Express, street railway*).
- Comparative statements from returns of railroad companies, 5-25.
- Comparison of railroad returns for the years 1906 and 1907, 326, 327.
- Compliance, certificates of, preliminary to charter, 148-153.
 Boston and Providence, 153.
- Concord, street railway express, Concord, Maynard and Hudson, 159.
 Lexington and Boston, 160, 161.

- Concord, Maynard and Hudson street railway, bonds, 130.
extension of time for crossing, Maynard, 181.
express transportation, Acton, Concord, Hudson, Maynard, Stow, 159.
(See also returns.)
- Connecticut River railroad, crossing abolition, Greenfield, 206.
(See also returns.)
- Connecticut Valley street railway, express transportation, Deerfield, Hatfield, Whately, 159, 160.
heating cars by hot water, 222.
service, Miller's Falls and Turners Falls, 86.
- Consolidated Railway of Connecticut (operating the Webster and Dudley and Worcester and Webster), transfer of leases to Worcester and South-bridge, 41.
(See also returns.)
- Consolidation, railroad, New England with New York, New Haven and Hartford, 144, 145.
- Consolidation, street railway, Amherst and Sunderland and Holyoke, 143.
Holyoke and Hampshire and Worcester, 144.
Waltham and Newton, 145, 146.
Western Massachusetts and Woronoco, 146, 147.
- Contracts, operating, 228, 231.
(See also *Tracks, joint use of*.)
- Construction, street railway, new, during the last year, 41.
cost of, railroad, 7. (See also tabulation of returns, pp. 310-324.)
street railway, 43.
per mile of main track, 47.
extension of time for, Worcester and Northern, 292.
(See also column one, in tabulated returns, pp. 332-335.)
- Conway Electric street railway (see returns).
- Corporate powers, extension of, 292.
- Corporations, Massachusetts railroad, 5-39.
- Cost of abolishing grade crossings (*see Grade Crossings*).
of construction (*see Construction*).
of equipment (*see Equipment*).
of fuel (*see Fuel*).
of operation (*see Operation*).
of repairs (*see Repairs*).
of street railways, per mile of track, 46, 47.
- Cottage City and Edgartown Traction Company (see returns).
- Coupling and uncoupling cars, accidents in, 29.
- Crossings, alteration of, by agreement, Agawam, Clinton White, commissioner, 220.
Chelmsford, George W. Bishop, commissioner, 220.
Maynard, George W. Bishop, commissioner, 220.
(See *Grade Crossings*.)
- Crossings, alteration of, Attleborough (Old Colony), 209-213.
Foxborough (Boston and Providence), 213-215.
New Bedford (Old Colony), 215-217.
Pittsfield (Berkshire), 217-219.
(See *Grade Crossings*.)
- Cunard Steamship Company, Sunday boats, 279.

- Danvers railroad, dropped from list, 5.
- Dartmouth and Westport street railway, communication concerning, to bank commissioner, 294.
location, Westport, 244.
(See also returns.)
- Debt, funded, floating, gross and net, of railroads, 9, 10.
of street railways, 45, 46.
- Debt, net, of street railway owned, 46.
- Dedham, operation, Old Colony, 266.
- Dedham and Franklin street railway (see returns).
- Deerfield, express transportation, Connecticut Valley, 159, 160.
(West), accident in, investigation, 225, 226.
- Deficit of railroads (*see tables*).
of street railway companies (see column 70 of tabulated returns, pp. 368-371).
- Description of street railways of commonwealth (see columns 71-77 of tabulated returns, pp. 372-375).
- Discrimination, in railroad fares, discussion, 64.
- Dividends, railroad, 10, 11.
percentage of, to capital stock, 11.
- Dividends, street railway, 45.
percentage of, to capital stock, 45.
communication to bank commissioner as to, 294.
(For dividends declared by each railroad corporation, see tabulated returns.)
(For dividends declared by each street railway company, see column 61 of tabulated returns, pp. 364-367.)
- Dominion Atlantic Railway Steamship Company, Sunday boats, 280.
- Dorchester, abolition of crossings, New York, New Haven and Hartford (Old Colony), report, 204, 205.
certificate, 205.
notice of petition for, Old Colony, 208.
change of grade, Old Colony, 192.
extension of time for crossing, New York, New Haven and Hartford, West End, 182.
operation, West End, 269.
- Dudley street elevated station, Boston, changes at, 277.
- Douglas, locations, Worcester and Providence, 253, 254.
- Earnings (*see Operation*).
- East Boston, joint use of tracks, Boston Elevated, Boston and Northern, 228.
location, Boston and Revere Electric, 243.
operation, West End, 269.
service, Boston Elevated, 83, 84, 85.
transfers to South Boston, Boston Elevated, 82.
tunnel, night cars, Boston Elevated, 84, 85.
- East Boston Citizens' Trade Association, service, Boston Elevated, 83, 84.
- East Bridgewater, location, Old Colony, 247.
- East Cambridge, service to Woburn, Boston and Maine, 78, 79.
extension into, Boston Elevated, 236.

- East Middlesex street railway, communication concerning, to bank commissioner, 294.
(See also returns.)
- East Taunton street railway (see returns).
- Eastern Steamship Company, Sunday boats, 280.
- Egremont, location, Berkshire, 241, 254.
- Electric railroads, law as to, discussion of, 55.
- Electric railways, grade crossings of railroads by, consent to, 179-182.
locations for, 235-254.
mileage of (*see Mileage*).
operation certificates, 262-269.
(*See also Street Railways.*)
- Electric cars, heating of, 58, 59.
safety devices for, discussion, 60.
ventilation of, discussion, 58, 59.
- Employees, injuries to, 26-29, 52 (*see also Accidents*).
number of, on railroads, 24.
on street railways, 51.
(See also tabulation of street railway returns, column 88, pp. 380-383.)
- Engines, locomotive, smoke from, discussion, 56, 57.
special report, 255-257.
spark arresters, discussion, 57.
approval of, 258-260.
- Equalization of railroad fares, discussion, 64.
- Equipment, railroad, number of locomotives, 24.
weight, 37-39.
number of cars, 24.
weight of, 39.
cost of, 7.
with fire extinguishers, 58.
(See also tabulation of returns.)
- Equipment, street railway, number of cars and other vehicles, 51.
number of electric motors, 51.
cost of, 43.
(See also columns 2, 78-84, in tabulated returns, pp. 332-335, 376-379.)
- Everett, location, Boston and Northern, 241.
operation, Boston and Northern, 262, 263.
- Exemption from steam heating, 221.
- Exeter, Hampton and Amesbury street railway (*see Amesbury and Hampton and Haverhill and Plaistow*).
- Exhibit for the year, railroads (*see tables*).
street railways (*see tables*).
- Expenditures, total, of railroads, 12.
of street railways, 48.
- Expenses of office, 296.
of operation, railroad, 13-17.
street railway, 48-50.
- Exigency, certificates, Boston and Eastern Electric, report upon, 148-153.
Boston and New York Electric, report upon, 148-153.

- Exigency, certificates, Boston and Providence Interurban Electric, report upon, 148-153.
 certificate, 153.
 Boston, Lowell and Lawrence Electric, report upon, 148-153.
- Express cars, number, 24.
- Express service, railroad, revenue from, 13.
 Barstow's Express, Boston and Maine, 154.
 T. A. Moynihan, Boston and Maine, 154.
- street railway, approval of authority, Berkshire, in Cheshire, 156, 157.
 Blue Hill, in Stoughton, 157.
 Boston and Worcester, in Framingham, Hudson, Marlborough, Natick, Newton, Northborough, Shrewsbury, Southborough, Wellesley and Westborough, 157, 158.
 Brockton and Plymouth, in Hanson, Pembroke and Whitman, 158.
 Concord, Maynard and Hudson, in Acton, Concord, Hudson, Maynard and Stow, 159.
 Connecticut Valley, in Deerfield, Hatfield and Whately, 159, 160.
 Interstate Consolidated, in Attleborough, 160.
 Lexington and Boston, in Concord, 160, 161.
 in Waltham, 161.
 Middlesex and Boston, in Natick, 162.
 Natick and Cochituate, in Natick, 162, 163.
 in Wellesley, 163.
 Newton, in Waltham, 164.
 in Watertown, 163, 164.
 Newton and Boston, in Watertown, 164, 165.
 Old Colony, in Avon, Braintree, Holbrook, Milton and Randolph, 168, 169.
 in Fall River, 166, 167.
 in Freetown, Lakeville and New Bedford, 165.
 in Quincy, 167, 168.
 in West Bridgewater, 169, 170.
 South Middlesex, in Ashland, Hopkinton and Sherborn, 170.
 Springfield and Eastern, in Brimfield, 171.
 Union, in New Bedford, 165.
 Waltham, in Waltham, 171, 172.
 Westborough and Hopkinton, in Westborough and Hopkinton, 172.
 special report to legislature, Boston Elevated, 155, 156.
- Extension of corporate powers, Plymouth, Carver and Wareham, 292.
 Worcester and Northern, 292.
 Worcester and Providence, 292.
- Extension of franchise, street railway, Pittsfield Electric, into Hancock, 173.
- Extension of time for grade crossings (*see Grade Crossings*).
 for construction, Plymouth, Carver and Wareham, 292.
 Worcester and Northern, 292.
 Worcester and Providence, 292.
- Fairhaven, location, Union, 249.
 operation, Union, 268.
- Fall River, bridge, report of joint board, 284, 285.
 operation, Old Colony, 266.
 street railway express, Old Colony, 166.

- Fall River-Somerset bridge, report of joint board, 284, 285.
- Falmouth, baggage charge in, New York, New Haven and Hartford, John B. Ratigan, 80.
- Fall River railroad, exchange of stock for Old Colony stock, 134.
- Fare, railroad, gradual reduction in rates of, 21.
- Fares and freights, railroad, 21, 22.
- Fares and service, orders on, 71-92.
- Fares, passenger, average, on all Massachusetts roads, 1878-1907, 21.
average on five Massachusetts roads, 1870, 1880, 1890, 1905-1907, 21.
discussion of, 64.
railroad, equalization of, report, 64.
New York, New Haven and Hartford, 80.
street railway, 81-92.
Boston Elevated, transfers at Scollay square, Boston, 81, 82.
at Atlantic avenue, 82.
at Harvard square, Cambridge, 81.
Milford and Uxbridge, Milford, 86, 87.
Newton and Boston, Needham, 87.
Newton, 88.
Old Colony, Quincy to Nantasket, 89, 90.
Western Massachusetts, Westfield, 91.
Worcester and Southbridge, Oxford, 89.
Worcester and Webster, Oxford, 89.
- Fenders, street railway, circular, 174-176.
discussion, 60.
- Fire extinguishers, discussion, 58.
order as to, 177, 178.
- Fitchburg, abolition of crossing, Vermont and Massachusetts, 205, 206.
notice of petition for crossing, abolition, Vermont and Massachusetts, 208.
private railroad, Fitchburg Yarn Company, 184, 185.
- Fitchburg railroad, abolition of crossing, Belmont, 203.
alteration of crossing, designation of commissioner, Maynard, 220.
change of grade, Belmont, 192, 193.
grade crossing, Concord, Maynard and Hudson, Maynard, 181.
whistling, Weston, 261.
(See also returns.)
(*See also Boston and Maine.*)^e
- Fitchburg and Leominster street railway, communication concerning, to bank commissioner, 294.
capital stock, 130.
heating cars by hot water, 223.
(See also returns.)
- Fitchburg Yarn Company, private railroad, Fitchburg, 184, 185.
- Floating debt, of railroads, 9, 10.
of street railways, 45, 46.
- Florence, private railroad, Norwood Engineering Company, 185, 186.
- Forest Hills, Boston, station, Boston Elevated (special report), 272, 273.
special report upon, to legislature, 272.
structure, changes in, plans for, 273, 274.
- Fore River Ship Building Company, private railroad, Quincy, 187.
extension of time, Quincy, Braintree, 185.

- Foxborough, alteration of crossing, New York, New Haven and Hartford, 213-215.
- Framingham, extension of time for crossing, New York, New Haven and Hartford, Boston and Worcester, 180, 181.
- joint use of tracks, South Middlesex, Milford and Uxbridge, 229, 230.
- locations, Boston and Worcester, 239, 243.
- operation, Boston and Worcester, 264.
- street railway express, Boston and Worcester, 157, 158.
- whistling, Boston and Albany, 260.
- Framingham and Lowell railroad, exchange of stock for Old Colony stock, 134.
- Franchise, extension of street railway, Pittsfield Electric, into Hancock, 173.
- Freetown, street railway express, Old Colony, 165.
- Freight cars, number of, in Massachusetts, 24. (*See also Cars.*)
- mileage (*see Volume of Traffic*).
- rates, average per ton mile, 1878-1907, 22.
- for five roads, 1870, 1880, 1890, 1905-1907, 22. (*See also Fares and Freights and Rates.*)
- revenue from *see Operation*).
- tracks, private (*see Private Railroads*).
- traffic (*see Volume of Traffic*).
- transportation, street railway (*see Express, street railway*).
- unloading, steamboats, Sundays, 279, 280.
- Freight and baggage transportation, street railway (*see Express, Street Railway*).
- Fuel, railroad, cost of, 23.
- Funded debt, of railroads, 9, 10. (*See also Bonds and Debt.*)
- of street railways, 45, 46.
- (*See also column 9 in tabulated returns, pp. 336-339.*)
- Gardner, Westminster and Fitchburg street railway, bonds, 131.
- (*See also returns.*)
- Gates (*see Grade Crossings, safeguards at*).
- General Court (*see Massachusetts Legislature*).
- General discussion of railroad and railway matters, 55-68.
- General summary of railroad accidents, 25-32.
- Georgetown, Rowley and Ipswich street railway, dropped from the list, 40.
- Ginn and Company, private railroad, Cambridge, 183.
- Gloucester, locations, Boston and Northern,*241.
- residents of, service, Boston and Maine, 79, 80.
- Grade, change of (*see Change of Grade*).
- Grade crossings, number of, 25.
- abolition of, expenditures since 1890, discussion, 57.
- accidents at, 30, 31.
- alteration of (*see Crossings*).
- protected, 25.
- unprotected, 25.
- protected and unprotected, casualties at, 30, 31.
- (*See also comparison 1906-1907, p. 327.*)
- Grade crossings (*abolition of*), Boston and Albany, Norwich and Worcester, Providence and Worcester, Worcester, 207, 208.

- Grade crossings (*abolition of*), Boston and Maine, Fitchburg, Belmont, 203.
 (Connecticut River), Greenfield, 206.
 Lynn, special report, 201, 202.
 Rowley, 207.
 (Vermont and Massachusetts), Fitchburg, 205, 206.
 New York, New Haven and Hartford (New England), Blackstone,
 special report, 198-201.
 certificate, 205.
 Hyde Park, 206, 207.
 (Old Colony), Barnstable, special report, 193-197.
 certificate, 202, 203.
 Dorchester, report, 204, 205.
 certificate, 205.
 (*See also Crossings, Alteration of.*)
 notices of petitions for, Dorchester, Old Colony, 208.
 Fitchburg, Vermont and Massachusetts, 208.
 Lowell, Old Colony, Lowell and Andover, 208.
 Lowell, Old Colony, 208.
 Lowell, Nashua and Lowell, 208.
 North Adams, Fitchburg, 208.
 Rowley, Boston and Maine, 209.
- Grade crossings (*permitted*), Cambridge, Blake and Knowles Steam Pump
 Works, 183, 184.
 Revere Sugar Refinery, 184.
 Fitchburg, Fitchburg Yarn Company, 184, 185.
 Florence, Norwood Engineering Company, 185, 186.
 Lowell, Boston and Maine, Boston and Northern, 180.
 Hamilton Manufacturing Company, 186.
 Quincy, Fore River Ship Building Company, 187.
 Quincy, Braintree, Fore River Ship Building Company, 185.
 Springfield, Springfield Gas Light Company, 187, 188.
 Westford, Boston and Maine, Lowell and Fitchburg (*emergency*), 182.
- Grade crossings (*refused*), Becket, Chester and Becket, 179.
- Grade crossings (*safeguards at*), Ashland, Boston and Albany, 188.
 Chicopee, Boston and Maine, Page-Storms Drop Forge Company, 188,
 189.
 Milton, New York, New Haven and Hartford, 189.
 Needham, New York, New Haven and Hartford, 189, 190.
 Oxford, New York, New Haven and Hartford, 190.
 Palmer, Central Vermont, 190, 191.
 Peabody, Boston and Maine, 191.
 Worcester, New York, New Haven and Hartford, 191.
- Grade crossings (*time extended*), Boston, New York, New Haven and Hartford
 by West End, 182.
 Bourne, Old Colony, by New Bedford and Onset, 179.
 Pittsfield, Boston and Albany, by Berkshire, 181.
 Framingham, New York, New Haven and Hartford, by Boston and
 Worcester, 180, 181.
 Maynard, Boston and Maine, by Concord, Maynard and Hudson, 181.
 Grafton and Upton railroad (see returns).

- Gravel cars, number of, in Massachusetts, 24.
 Great Barrington, locations, Berkshire, 241, 254.
 Greenfield, abolition grade crossing, Connecticut river, 206.
 Gross assets, of railroad corporations, 7.
 for ten years, 8.
 of street railway companies, 43.
 liabilities, of railroad corporations, 8.
 for ten years, 8.
 of street railway companies, 44.
- Hall, Walter Perley, succeeds to chairmanship of Board, 55.
 Hamilton Manufacturing Company, private railroad, Lowell, 186.
 Hamilton, express service, Boston and Maine, T. A. Moynihan, 154.
 Hampshire street railway, purchase by Holyoke, 144.
 (*See Holyoke street railway.*)
 (See also returns.)
- Hancock, extension into, Pittsfield Electric, 173.
 Hanson, street railway express, Brockton and Plymouth, 158.
 Harbor and land commissioners, report as member of joint boards, 284-291.
 Hartford and Worcester street railway, operating contract, Worcester and Southbridge, 41, 231.
 approval of bridge plans, Sturbridge, 122.
 operation, Sturbridge, 264.
 (See also returns.)
- Hatfield, express transportation, Connecticut valley, 159, 160.
 Haverhill, locations, Boston and Northern, 242.
 Haverhill and Southern New Hampshire, 244.
 operation, Boston and Northern, 263.
 Haverhill and Amesbury street railway (see returns).
 Haverhill and Plaistow street railway (see returns).
 Haverhill and Southern New Hampshire street railway, location, Haverhill, 244.
 (See also returns.)
- Hayes, Francis T., petition as to train service, Milford branch, Boston and Maine, 78.
- Heating and ventilation of cars, discussion, 58, 59.
 Heating cars by steam, exemption from, Central New England, 221.
 by hot water, Connecticut Valley, 222.
 Lexington and Boston, 223.
 Fitchburg and Leominster, 223.
 Boston and Albany, 221.
 by electricity (street railways) circular, 222.
- Hennigan, John Q., reappointment as railroad inspector, 295.
- Height of bridges (*see Bridges*).
 Highway grade crossings (*see Grade Crossings*).
 Highway locations (*see Locations, street railway*).
 Highways (*see Bridges and Crossings*).
- Hingham, location, Old Colony, 247.
 operation, Old Colony, 266.
- Holbrook, location, Old Colony, 247.
 operation, Old Colony, 267.
 street railway express, Old Colony, 168, 169.

- Holliston, locations, Milford and Uxbridge, 245.
- Holyoke, locations, Holyoke, 244.
 - operation, Holyoke, 264.
 - station grounds, condition of, 278.
- Holyoke and Westfield railroad, station grounds at Holyoke, 278.
 - (See also returns.)
- Holyoke street railway, communication concerning, to bank commissioner, 294.
 - locations, Chicopee, 244.
 - Holyoke, 244.
 - stock, 131.
 - (See also returns.)
 - operation, Holyoke, 264.
 - purchase of Hampshire, 144.
 - purchase of Amherst and Sunderland, 143.
- Hoosac Tunnel and Wilmington railroad, fire extinguishers, 177, 178.
 - Sunday trains, 281.
 - (See also returns.)
- Hoosac Valley street railway, dropped from the list, 40.
- Hopkinton, street railway express, South Middlesex, 170.
 - Westborough and Hopkinton, 172.
- Horn Pond Branch railroad (see returns).
- Hot water heating, Connecticut Valley, 222.
 - Fitchburg and Leominster, 223.
 - Lexington and Boston, 223.
- House of Representatives, special reports to, on Boston and Albany service, 71-74.
 - on Forest Hills station, Boston Elevated, 272.
 - on freight transportation by Boston Elevated, 155, 156.
- Hudson, street railway express, Boston and Worcester, 157, 158.
 - Concord, Maynard and Hudson, 159.
- Hyde Park, crossing, abolition of, New England, 206, 207.
 - change of grade, New England, 193.
- Income, railroads, comparative, from passenger and freight service, 13.
 - from operation (*see Operation*).
 - total, 12.
 - net divisible, 11.
 - (For income of each road, see tabulation of returns, pp. 310-324.)
- Income, street railways, from operation (*see Operation*).
 - total, 47-50.
 - net divisible, 45.
 - (For income of each company, see columns 22-28, in tabulated returns, pp. 344-347.)
- Industrial committee of Weymouth, service, Old Colony, 91, 92.
- Inspection, of railroad bridges, method of, 35-37.
- Injuries to persons (*see Accidents*).
- Injuries to persons and property on street railways, damages for (see returns).
- Inspection of locomotive boilers, circular, 257, 258.
- Inspectors, railroad, appointment of, Hennigan, John Q., 295.
 - Larry, Winfield L., 295.
 - Parant, John H., 295.

- Inspectors, railroad, appointment of, Seward, Henry W., 295.
- Interest on funded and other debts, railroads (see returns).
street railways (see returns).
- Interlocking signals, approval of, Boston Terminal Company, 119.
- Interstate Consolidated street railway, express transportation, Attleborough, 160.
joint use of tracks, Norton and Taunton, Attleborough, 229.
Taunton and Pawtucket, Attleborough, 231.
locations, Attleborough, 244.
North Attleborough, 244.
operation, Attleborough, 264.
North Attleborough, 265.
(See also returns.)
- Interurban railways (see *Electric Railroads*).
- Investigation, of accidents, Charlton, 224, 225.
Somerville and West Deerfield, 225, 226.
Springfield, circular, 226, 227.
- Investments (see *Permanent Investments*).
- Ipswich, locations, Boston and Northern, 242.
operation, Boston and Northern, 263.
- Issues of railroad and street railway stock and bonds, 39, 54.
(See also *Bonds, Capital Stock and Consolidation*.)
- Jackson, James F., chairman of board, resignation of, 55.
- Joint use of tracks (see *Tracks*).
- Kingston, height of bridge, Old Colony, 120.
- Lakeville, street railway express, Old Colony, 165.
- Land and buildings, gross assets in, street railway, 43.
(See also tabulation of returns, column 3, pp. 334, 337.)
railroad, 7.
- La Pointe, John P., and others, service, Connecticut Valley, 86.
- Larry, Winfield, appointment as railroad inspector, 295.
- Lawrence, locations, Boston and Northern, 242.
Lawrence and Methuen, 245.
operation, Boston and Northern, 263.
- Lawrence and Methuen street railway, location, Lawrence, 245.
(See also returns.)
- Legislature (see *Massachusetts Legislature*).
- Length of line (see *Mileage*).
- Lexington, location, Lexington and Boston, 245.
- Lexington and Boston street railway, heating cars by hot water, 223.
location, Lexington, 245.
street railway express, Concord, 160, 161.
Waltham, 161.
(See also returns.)
- Liabilities of railroad corporations, 7-10.
of street railway companies, 43, 44.
(See also tabulated returns of companies, pp. 310-324; 336-339.)
- Lights, in cars, 293.
on rear of electric cars, circular, 226.

- Linwood street railway, locations, Northbridge, 245, 254.
(See also returns.)
- Liverpool life guard, for electric cars, 175, 176.
- Location, electric railroad, advertising of route, Boston and Providence Inter-urban, 234.
- Location, railroad, alteration of, Old Colony, Bourne, 232, 233.
extension of time for, 233.
- Locations, street railway, in highways, 235-253.
on private land, 254.
(See also under company and place headings.)
- Locomotive boilers, testing of, circular, 257, 258.
engines, cost of repair of (*see Repairs*).
number owned (*see Equipment*).
smoke from, discussion, 56, 57.
special report, 255-257.
- spark arresters, discussion, 57.
orders, 258-260.
- weights of, 37, 38.
- whistling of (*see Whistling*).
- Longmeadow, location, Springfield, 248.
- Lowell, grade crossing, Boston and Maine by Boston and Northern, 180.
location, Boston and Northern, 242.
notices of petitions for crossing abolitions, Old Colony, Nashua and Lowell, Lowell and Andover, 208.
operation, Boston and Northern, 263.
private railroad, Hamilton Manufacturing Company, 186.
- Lowell, Acton and Maynard street railway (*see returns*).
- Lowell and Andover railroad (*see returns*).
- Lowell and Fitchburg street railway, bonds, 132.
emergency crossing, Boston and Maine, Westford, 182.
location, Chelmsford, 245.
operation, Chelmsford, 265.
Westford, 265.
- stock, 132.
(See also returns.)
- Lowell and Framingham railroad, exchange of stock for Old Colony stock, 134.
- Lowell and Pelham street railway (*see returns*).
- Lowell and Woburn street railway, dropped from the list, 40.
- Lynn, grade crossing abolition, Boston and Maine (special report), 201, 202.
locations, Boston and Northern, 242.
operation, Boston and Northern, 263.
Nahant and Lynn, 265.
- Mail cars, number of, in Massachusetts, 24.
- Mail, revenue from, on railroads, 13. (*See also tables*).
on street railways, 48.
- Maine Coast Transportation Company, Sunday steamboats, 280.
- Malden, locations, Boston and Northern, 242.
West End, 251.
operation, Boston and Northern, 263.
West End, 269.
service, Boston Elevated, Boston and Northern, 85.

- Mansfield, operation, Norton and Taunton, 266.
Marblehead, location, Boston and Northern, 242.
Marion, locations, New Bedford and Onset, 239, 240, 246.
Marlborough, street railway express, Boston and Worcester, 157, 158.
Marlborough and Westborough street railway (see returns).
Martha's Vineyard street railway (see returns).
Massachusetts Legislature, special report to House, on Boston and Albany service, 71-74.
 on Forest Hills station, Boston Elevated, 272.
 on freight transportation of Boston Elevated, 155, 156.
Massachusetts railroad corporations, 5-39.
 street railway companies, 40-54.
Mattapoisett, location, New Bedford and Onset, 246, 254.
 operation, New Bedford and Onset, 265.
Maynard, alteration of crossing, George W. Bishop, commissioner, 220.
 extension of time for crossing, Boston and Maine, by Concord, Maynard and Hudson, 181.
 street railway express, Concord, Maynard and Hudson, 159.
Medfield and Medway street railway (see returns).
Medford, height of bridge, Boston and Maine, 120, 121.
 locations, West End, 251.
Melrose, express service, Boston and Maine, Barstow's Express, 154.
Merchants and Miners Transportation Company, Sunday boats, 280.
Mergers (*see Consolidations*).
Methuen, location, Boston and Northern, 242.
Metropolitan Steamship Company, Sunday boats, 280.
Middleborough, location, New Bedford and Onset, 254.
 operation, New Bedford and Onset, 265.
Middlesex and Boston street railway, express transportation, Natick, 162.
 locations, Natick, 245.
 name, approval of, 136.
 stock, 136.
 (*See South Middlesex.*)
 (See also returns.)
Mileage, railroad, owned and operated, 6, 7.
 passenger, freight, train and car (*see Volume of Traffic*).
 street railway, owned and operated, 41-43.
Milford, fares, Milford and Uxbridge, 86, 87.
 service, Milford and Uxbridge, 86, 87.
Milford Branch (Boston and Maine) service, 78.
Milford, Attleborough and Woonsocket street railway (see returns).
Milford, Franklin and Providence railroad (see returns).
Milford and Uxbridge street railway, fares, Milford, 86, 87.
 locations, Holliston, 245.
 joint use of tracks, South Middlesex, in Framingham, 229, 230.
 service, Milford, 86, 87.
 (See also returns.)
Milford and Woonsocket railroad (see returns).
Millbury, locations, Worcester and Providence, 253, 254.
Millers Falls, service, Connecticut Valley, 86.
Milton, protection at crossing, New York, New Haven and Hartford, 189.
 street railway express, Old Colony, 168, 169.

- Miscellaneous reports and orders, 292, 295.
Monson, operation, Springfield and Eastern, 268.
Mortgage, appointment of trustee under, Boston and Northern, 126, 127.
Motors, electric, number of, 51.
Mount Tom street railway (see returns).
Moynihan, Timothy A., express facilities, Boston and Maine, 154.
- Nahant, locations, Nahant and Lynn, 246, 254.
 operation, Nahant and Lynn, 265.
Nahant and Lynn street railway, locations, Nahant, 246, 254.
 operation, Lynn, Nahant, 265.
 (See also returns.)
Name, change of, South Middlesex, to Middlesex and Boston, 136.
Nantasket, fare from Quincy, Old Colony, 89, 90.
Nantucket Central railroad, bonds, 133.
 (See also returns.)
Nashua, Acton and Boston railroad (see returns).
Nashua and Lowell railroad (see returns).
Natick, locations, Boston and Worcester, 238, 239.
 special report, 237, 238.
 Middlesex and Boston, 245.
 Natick and Cochituate, 246.
 operation, Natick and Cochituate, 265.
 street railway express, Boston and Worcester, 157, 158.
 Middlesex and Boston, 162.
 Natick and Cochituate, 162, 163.
Natick and Cochituate street railway, express transportation, Wellesley, 163.
 Natick, 162, 163.
 locations, Natick, 246.
 operation, Natick, 265.
 (See also returns.)
Needham, fares and service, Newton and Boston, 87.
Needham Selectmen, protection at crossing, New England, 189, 190.
New Bedford, alteration of crossing, New York, New Haven and Hartford,
 215-217.
 location, Union, 249.
 operation, Union, 268, 269.
 street railway express, Old Colony, 165.
 Union, 165.
New Bedford and Onset street railway, extension of time for crossing, Bourne,
 179.
 locations, Marion, 239, 240, 246.
 Mattapoissett, 246, 254.
 Middleborough, 254.
 operation, Mattapoissett, 265.
 Middleborough, 265.
 (See also returns.)
Newburyport, location, Citizens Electric, 244.
 operation, Citizens Electric, 264.
Newburyport railroad, dropped from the list, 5.
New England Maple Syrup Company, private railroad, Cambridge, 183.

- New England railroad, abolition of crossing, Blackstone, report, 198-201.
certificate, 203, 204.
Hyde Park, 206, 207.
change of grade, Hyde Park, 193.
protection at crossing, Needham, 189, 190.
purchase by New York, New Haven and Hartford, 144.
(See also returns.)
- New Haven and Northampton railroad (see returns).
- New London Northern railroad, fire extinguishers, 177, 178.
spark arresters, 259.
safeguard at crossing, Palmer, 190, 191.
(See also returns.)
- New street railway company, Middlesex and Boston, 136.
- Newspapers, designation of, advertisement of hearing on route, Boston and Providence Interurban Electric, 234.
- Newton, joint use of tracks in, Boston and Worcester, Newton, Newton and Boston, 229.
locations, Newton, 246.
West End, 251.
operation, Newton, 266.
service, Newton and Boston, 88.
street railway express, Boston and Worcester, 157.
transfers, Newton and Boston, 88, 89.
- Newton street railway, joint use of tracks, Newton and Boston, Boston and Worcester, in Newton, 229.
locations, Newton, 246.
Waltham, 247.
operation, Newton, 266.
purchase of Waltham, 145, 146.
street railway express, Waltham, 164.
Watertown, 163, 164.
(See also returns.)
- Newton and Boston street railway, fares, Needham, 87.
Newton, 88, 89.
joint use of tracks, Newton, Boston and Worcester, in Newton, 229.
service, Needham, 87.
Newton, 88.
street railway express, Watertown, 164, 165.
(See also returns.)
- New York Central and Hudson River railroad (*see Boston and Albany*).
- New York, New Haven and Hartford, abolition of crossings, Barnstable (Old Colony), report, 193-197.
certificate, 202, 203.
Blackstone (New England), report, 198-201.
certificate, 203, 204.
Dorchester (Old Colony), report, 204, 205.
certificate, 205.
Hyde Park (New England), 206, 207.
Worcester (Norwich and Worcester, Providence and Worcester), 207, 208.

- New York, New Haven and Hartford, alteration of crossings, Attleborough (Boston and Providence), 209-212.
 Chelmsford, designation of commissioner, 220.
 Foxborough (Boston and Providence), 213-215.
 New Bedford (Old Colony), 215-217.
 Pittsfield (Berkshire), 217-219.
 baggage charge, John B. Ratigan, Falmouth, 80.
 block signals, approval of, 119.
 change of grade (New England), Hyde Park, 193.
 (Old Colony) Dorchester, 192.
 emergency tools on baggage cars, 293.
 extension of time for crossing, Boston and Worcester, Framingham, 180, 181.
 New Bedford and Onset, Bourne, 179.
 West End, Boston, 182.
 fire extinguishers, 177, 178.
 height of bridge (Old Colony), Kingston, 120.
 notice of petition for abolition (Old Colony), Dorchester, 208.
 Lowell, 208.
 passengers carried to Boston, 316.
 passengers carried from Boston, 316.
 purchase of New England, 144.
 protection at crossings, Milton, 189.
 Needham, 189, 190.
 Oxford, 190.
 Worcester, 191.
 spark arrester, approval of, 260.
 station grounds, Holyoke, 278.
 Sunday trains, 281.
 (See also returns.)
- New York, Brockton and Boston Canal and Transportation Company, stock, 133, 134.
- Norfolk and Bristol street railway, location, Walpole, 247.
 (See also returns.)
- North Adams, notice of petition for crossing abolition, Fitchburg railroad, 208.
- North Attleborough, locations, Interstate Consolidated, 244.
 operation, Interstate Consolidated, 265.
- Northampton, location, Northampton, 247.
 private railroad, Norwood Engineering Company, 185, 186.
- Northampton street railway, location, Northampton, 247.
 (See also returns.)
- Northborough, street railway express, Boston and Worcester, 157, 158.
- Northbridge, locations, Linwood, 245, 254.
 Worcester and Blackstone Valley, 252.
 operation, Worcester and Blackstone Valley, 269.
 Uxbridge and Blackstone, 268.
- North Brookfield railroad (see returns).
- North End street railway (see returns).

- Norton and Taunton street railway, joint use of tracks, Interstate Consolidated, in Attleborough, 229.
Taunton and Pawtucket, in Attleborough, 230.
location, Attleborough, 247.
operation, Attleborough, 266.
Mansfield, 266.
(See also returns.)
- Norwich and Worcester railroad, crossing abolition, Worcester, 207, 208.
(See also returns.)
- Norwood Engineering Company, private railroad, Florence, 185, 186.
- Norwood, Canton and Sharon street railway (see returns).
- Number of railroad corporations, 5.
of street railway companies, 40.
of operating street railway companies, 41.
of railroad employees, 24.
of street railway employees, 51.
- Ocean Steamship Company, Sunday boats, 280.
- Old Colony railroad, abolition of crossing, Barnstable, report, 193-197.
certificate, 202, 203.
Dorchester, report, 204, 205.
certificate, 205.
notice of petition for, 208.
in Lowell, 208.
alteration of crossing, New Bedford, 215-217.
change of grade, Boston, 192.
extension of time for crossing by New Bedford and Onset, Bourne, 179.
height of bridge, Kingston, 120.
relocation, Bourne, 232, 233.
stock, issue and sale at auction, 134.
(See also returns.)
- Old Colony street railway, approval of bridge plans, 122.
bonds, 135.
express transportation, Avon, 168, 169.
Braintree, 168, 169.
Fall River, 166.
Freetown, 165.
Holbrook, 168, 169.
Lakeville, 165.
Milton, 168, 169.
New Bedford, 165.
Quincy, 167, 168.
Randolph, 168, 169.
West Bridgewater, 169, 170.
fares, Quincy to Nantasket, 89, 90
locations, Abington, 247.
Brockton, 247.
East Bridgewater, 247.
Hingham, 247.
Holbrook, 247.
Quincy, 247, 248.

- Old Colony street railway, locations, Somerset, 248.
 Stoughton, 248.
operation, Braintree, 266.
 Brockton, 266.
 Dedham, 266.
 Fall River, 266.
 Hingham, 266.
 Holbrook, 267.
 Quincy, 267.
 Stoughton, 267.
 Taunton, 267.
 Weymouth, 267.
service, Weymouth, 91, 92.
stock, 135.
 (See also returns.)
- Operating contracts, approval of, Boston and Albany, Providence, Webster and Springfield, 228.
 Worcester and Southbridge, Hartford and Worcester, 231.
- Operating expenses (*see Operation*).
 (*See also Tracks, joint use of.*)
 (For operating expenses of street railway companies, see columns 29-49 of tabulated returns, pp. 348-359.)
- Operation, railroad, earnings and expenses of, 13-17.
 earnings and expenses of, per mile of road operated, 15.
 per freight-train mile, 16.
 per passenger-train mile, 16.
 per total revenue-train mile, 16.
 per total train mile, 17.
 of trains, Boston and Maine, 270.
 ratio of expenses, to gross earnings, 14, 15.
 speed at Wilmington Junction, Boston and Maine, 270.
- Operation, street railway, certificates preliminary to, 262-269.
 approval of regulation, Pittsfield, 270.
 earnings and expenses of, 48-50.
 earnings and expenses of, per mile of main track, 50.
 per car mile run, 50.
 per passenger carried, 50.
 of cars, in Southbridge, 270, 271.
 in Pittsfield, 270.
 of companies, 48.
 ratio of expenses, to gross earnings, 49.
 speed of cars, 270, 271.
- Orders of the Board relating to railroads and street railways, 71-283.
 miscellaneous, 292-295.
- Oxford, fares, Worcester and Southbridge, Worcester and Webster, 89.
 protection at crossing, New York, New Haven and Hartford railroad, 190.
- Page-Storms Drop Forge Company, protection at crossing, Boston and Maine, Chicopee, 188, 189.
- Palmer, operation, Springfield and Eastern, 268.
 safeguard at crossing, Central Vermont, 190, 191.

- Parant, John H., appointment as railroad inspector, 295.
- Park square station, report as to, Boston and Albany, 72, 104, 105.
- Passenger cars (*see Cars*).
fares (*see Fares and Freights*).
- Passenger revenue (*see Operation*).
traffic (*see Volume of Traffic*).
- Passenger, injuries to, 26-28, 51, 52. (*See also Accidents.*)
- Passengers transported, railroad (*see tabulated returns*).
street railway (*see columns 85, 86, tabulated returns, pp. 380-383*).
- Peabody, crossing protection, Boston and Maine, 191.
location, Boston and Northern, 242.
- Pembroke, street railway express, Brockton and Plymouth, 158.
- Pennsylvania railroad cars, emergency tools for, 293.
- Pepperell, train service, Boston and Maine, 78.
- Permanent investments, street railways, 46, 47.
per mile of railway owned, 47.
- Pfingst fender, for electric cars, 174, 175.
- Pittsfield, alteration of crossing, New York, New Haven and Hartford, 217-219.
extension of time for crossing by Berkshire, Boston and Albany, 181.
location, Berkshire, 241.
operation, approval of regulation, Pittsfield Electric, 270.
- Pittsfield Electric street railway, bonds, 136.
communication concerning, to bank commissioner, 294.
extension into Hancock, 173.
operation, approval of regulation, Pittsfield, 270.
(*See also returns.*)
- Pittsfield and North Adams railroad (*see returns*).
- Plans, approval of, street railway, Boston Elevated, Cambridge subway, 235, 236.
Charlestown storage yard, 277.
- Boston, Commercial street footbridge, 121.
Dudley street, changes in structure and station, 277.
East Cambridge extension, 236.
Forest Hills station, 273, 274.
Washington street, 236, 237.
- Boston and Northern, bridge over Boston and Maine, Andover, 122.
- Hartford and Worcester, bridge, Sturbridge, 122.
- Old Colony, bridge, Raynham, 122.
- Springfield and Eastern, bridge, Brimfield, 122.
- Plymouth, Carver and Wareham street railway, extension of corporate powers, 292.
(*See also returns.*)
- Plymouth and Middleborough railroad (*see returns*).
- Plymouth and Sandwich street railway (*see returns*).
- Point of Pines station, Revere, relocation, 278.
- Private lands, street railway construction upon, 254. (*See also Locations.*)
- Private railroads, Cambridge, Blake and Knowles Steam Pump Works, 183, 184.
Cambridge, New England Maple Syrup Company and others, 183.
Cambridge, Revere Sugar Refinery, 184.

- Private railroads, Fitchburg, Fitchburg Yarn Company, 184, 185.
 Florence, Norwood Engineering Company, 185, 186.
 Lowell, Hamilton Manufacturing Company, 186.
 Northampton, Norwood Engineering Company, 185, 186.
 Quincy, Fore River Shipbuilding Company, 187.
 Quincy and Braintree, Fore River Shipbuilding Company, extension of
 time, 185.
 Springfield, Springfield Gas Light Company, 187, 188.
Proceeds of stock and bond issues, approval of application, West End, 139.
Providence and Fall River street railway, location, Swansea, 248.
 operation, Swansea, 267.
 (See also returns.)
Providence and Worcester railroad, crossing abolition, Worcester, 207, 208.
 (See also returns.)
Providence, Webster and Springfield railroad, operating contract, Boston
 and Albany, 228.
 (See also returns.)
Public ways (*see Bridges and Crossings*).
Purchase of railroads and street railways (*see Consolidations*).

Quincy, fares to Nantasket, Old Colony, 89, 90.
 Fore River Shipbuilding Company, extension of time, 185.
 locations, Old Colony, 247, 248.
 operation, Old Colony, 267.
 private railroad, Fore River Shipbuilding Company, 187.
 street railway express, Old Colony, 167, 168.
Quincy Board of Trade, fares to Nantasket, Old Colony, 89, 90.

Railroad Commissioners, names and official terms of, iii.
 reports as grade crossing commission, Barnstable, 193-197.
 Blackstone, 198-200.
 designated for special commissions, 220.
 expenses of office of, 296.
Railroad accidents, summary of, 25-31.
 at grade crossings, 30, 31.
 character of, 28, 29.
 investigation of, Somerville and West Deerfield, 225, 226.
 to employees, 29.
 to passengers, 27, 28.
 to travellers at grade crossings, 30, 31.
 to trespassers, 32.
 (*See also Accidents.*)
 bridges (*see Bridges*).
 consolidation, 144.
 construction (*see Construction*).
 corporations, 5.
 employees, number of, 24.
 fares, discussion, 64.
 fire extinguishers, 177, 178.
 financial condition and business operations of, 5-24.
 grade crossings, number of, 25. (*See Grade Crossings.*)

- Railroad accidents, inspectors, appointment of, 295.
 names and terms of office of, iii.
 locomotive boilers, testing of, 257, 258.
 locomotive engines, smoke from, 56, 57, 255-257.
 mileage, 6, 7. (*See also Mileage.*)
 returns (*see Annual Returns*).
 service, special reports, to legislature, etc., Boston and Albany, 71-77.
 discussion of, 65-68.
 signals, approval of, 118, 119.
 statistics, 5-39; 299-329.
 stock and bonds, issues of, 39.
 traffic (*see Volume of Traffic*).
Railroad relief associations, Boston, Revere Beach and Lynn, approval of by-laws, 294.
Railroads owned and operated, 6, 7.
 description of, 299-309.
 safeguards upon, discussion, 60-63.
 (*See the several headings in this Index.*)
Rails, cost of renewal of (*see Repairs*).
Railways (*see Street Railways*).
Randolph, street railway express, Old Colony, 168, 169.
Rates, freight, average, on all Massachusetts roads, 1878-1907, 22.
 average, on five Massachusetts roads, 1870-1907, 22.
Ratigan, John B., baggage charge, New York, New Haven and Hartford, Falmouth, 80.
Ratio of operating expenses, railroads, 14, 15.
 street railways, 49.
Raynham, approval of bridge plans, Old Colony, 122.
Reading, location, Boston and Northern, 242.
 whistling, Boston and Maine, 260, 261.
Regulations as to speed of cars, Pittsfield, 270.
 Southbridge, 270, 271.
Relief association, railroad, approval, by-laws, 294.
Rentals received and paid for lease of railroads (*see returns*).
 of street railways (*see returns*).
Repairs, railroad, cost of, of cars, 23, 24.
 of bridges, 23.
 of locomotives, 24.
 of roadbed, 23.
 street railway, cost of, of cars and vehicles (*see returns*).
 of electric wiring, motors, etc. (*see returns*).
 of roadbed, buildings, etc. (*see returns*).
Report to board, special, Boston and Albany, 93-117.
Returns, annual, railroad and railway (*see Annual Returns*).
Revenue (*see Income and Operation*).
Revere, relocation Point of Pines station, 278.
Revere Sugar Refinery, private track, Cambridge, 184.
Revision of fares, petitions for (*see Fares and Service*).
Rhode Island and Massachusetts railroad (*see returns*).
Rhode Island Company, Woonsocket street railway merged with, 40.
Roadbed, cost of repair of (*see Repairs*).

- Rockport, location, Boston and Northern, 243.
service, Boston and Maine, 79, 80.
- Rolling stock, amount of, 24. (*See also Equipment.*)
weights of, 37-39.
- Route, fixing of, designation of newspapers for advertisement of hearing on,
Boston and Providence Interurban, 234.
- Rowley, crossing abolition, Boston and Maine, 207.
notice of petition for crossing abolition, 209.
bridge, height of, Boston and Maine, 121.
- Roxbury, approval of plans, Boston Elevated, Washington street near Dudley,
236, 237, 277.
- Safeguards at crossings (*see Grade Crossings*).
- Safety devices for street cars, discussion, 60; 174-176.
- Salaries and general expenses, street railways, columns 29, 33, 348-351.
- Sale of railroads and street railways (*see Consolidations and Leases*).
- Salem, locations, Boston and Northern, 243.
operation, Boston and Northern, 263, 264.
- Sandwich, relocation, Old Colony railroad, 232, 233.
- Savings banks, bonds of street railway companies which may be purchased
by, 294.
- Service, railroad, Boston and Albany, discussion, 65-68.
special reports, 71-77.
Boston and Maine, Cape Ann, 79, 80.
Milford branch, 78.
Winchester to Woburn, 78, 79.
street railway, Boston Elevated, East Boston, 84.
Malden, 85.
Boston and Northern, Malden, 85.
West Newbury, 90, 91.
Citizens Electric, West Newbury, 90, 91.
Connecticut Valley, Turners Falls, 86.
Milford and Uxbridge, Milford, 86, 87.
Newton and Boston, Needham, 87.
Newton, 88.
Old Colony, Weymouth, 91, 92.
(*See also Fares.*)
- Seward, Henry W., appointment as railroad inspector, 295.
- Sheffield, locations, Berkshire, 241, 254.
- Shelburne Falls and Colrain street railway, location, Buckland, 248.
(*See also returns.*)
- Sherborn, street railway express, South Middlesex, 170.
- Shrewsbury, street railway express, Boston and Worcester, 157, 158.
- Signals, block, railroad, discussion of, 60-63.
approval of, 118, 119.
interlocking, approval of, Boston Terminal Company, 119.
- Smoke from locomotive engines, discussion, 56, 57.
special report, 255-257.
- Somerset, bridge, report of joint board, 284, 285.
location, Old Colony, 248.
- Somerville, accident at, investigation, 225, 226.

- Somerville, locations, West End, 251, 252.
 Somerville street railway (see returns).
 South Boston, transfers to East Boston on Boston Elevated, 82.
 Southborough, locations, Boston and Worcester, 243.
 street railway express, Boston and Worcester, 157, 158.
 Southbridge, speed and operation of electric cars, 270, 271.
 South Middlesex street railway, express transportation, Ashland, Hopkinton, Sherborn, 170.
 change of name, approval of, 136.
 joint use of tracks, Milford and Uxbridge, in Framingham, 229, 230.
 (*See Middlesex and Boston.*)
 (See also returns.)
 Spark arresters, discussion, approval of, 57.
 Boston and Albany, 259.
 Boston and Maine, 258.
 Boston, Revere Beach and Lynn, 259.
 Central Vermont, 259.
 New York, New Haven and Hartford, 260.
 Special commission, report on Cape Cod canal, 286-291.
 report on Fall River bridge, 284, 285.
 members designated for, 220.
 reports of Board as, on grade crossings, 193-201.
 Speed regulations, railroad, Boston and Maine, at Wilmington Junction, 270.
 railway, in Southbridge, 270, 271.
 Springfield, joint use of tracks, Springfield, Western Massachusetts, 230.
 locations, Springfield, 248.
 operation, Springfield, 267.
 private railroad, Springfield Gas Light Company, 187.
 Springfield street railway, accident on, circular notice, 226, 227.
 communication to bank commissioner as to, 294.
 joint use of tracks, Western Massachusetts, Springfield and West Springfield, 230.
 locations, Longmeadow, 248.
 Springfield, 248.
 operation, Springfield, 267.
 stock, 137.
 (See also returns.)
 Springfield and Eastern street railway, approval of bridge plans, Brimfield, 122.
 express transportation, Brimfield, 171.
 operation, Brimfield, 268.
 Monson, 268.
 Palmer, 268.
 stock, 137.
 sale at auction, 138.
 Springfield Gas Light Company, private railroad, Springfield, 187, 188.
 State street station, changes at, 275.
 transfers at, 82.
 Stations and station accommodations, railroad, Boston, Revere Beach and Lynn, relocation, Point of Pines, Revere, 278.
 New York, New Haven and Hartford, Holyoke, 278.

- Stations and station accommodations, street railway, Boston Elevated, changes in, 275.
 - Broadway extension, Boston, 274.
 - Dudley street, Boston, changes at, 277.
 - Forest Hills, Boston, 273, 274.
 - Park square, Boston, report on, Boston and Albany, 104.
 - City and Thompson squares, Charlestown, shelters, 274, 275, 276.
 - State street, Boston, transfers, 82.
 - Cambridge subway, as to number, 235, 236.
 - Battery street, Boston, changes, 275.
 - Beach street, Boston, changes, 275.
 - Northampton street, Boston, changes, 275.
 - South (elevated) changes, 275.
 - State street, Boston, changes, 275.
 - transfers at, 82.
- Statistics, railroad, 5-39; 299-329.
 - street railway, 42-54; 332-387.
- Steamboats, Sunday, 279, 280.
- Steam heating, exemption from, Boston and Albany, 221.
 - Central New England, 221.
- Stock, railroad, in other companies, 7.
 - (*See also Capital Stock.*)
- Stockholders, railroad (see tabulated returns, p. 329).
 - street railway (see tabulated returns, columns 89-91, pp. 380-383).
- Stony Brook railroad (see returns).
- Stoughton, street railway express, Blue Hill, 157.
 - location, Old Colony, 248.
 - operation, Old Colony, 267.
- Stow, street railway express, Concord, Maynard and Hudson, 159.
- Street cars, number of, 51.
 - operation of, 262-269.
 - doors, locking, 226.
- Street railway accidents, 51, 52.
 - circular as to, 226, 227.
 - investigation of, Charlton, 224, 225.
- bridges, approval of plans for, 122.
 - report of engineer as to, 52, 53.
- capital, 45-47.
- construction (*see Construction*).
- dividends, 45.
- employees, number of, 51.
- express, 155-172.
- fares and service, 81-92.
- fenders and wheelguards, 60; 174-176.
- joint use of tracks, 228-231.
- leases, 41.
- locations, highways, 235-253.
 - private land, 254.
- mileage, 41-43.
- operation, certificates preliminary to, 262-269.

- Street railway accidents, reports (*see Annual Reports*).
 service (*see Service*).
 speed (*see Speed Regulations*).
 statistics, 42-54. (*See also* tabulated returns, 332-387.)
 traffic (*see Volume of Traffic*).
- Street railway companies, added to the list, 40.
 capital stock and dividends, 45. (*See also tables*.)
 consolidation of, 41, 143-147. (*See also Consolidation*.)
 dropped from the list, 40.
 earning five per cent dividends, 294.
 financial condition and operations of, 42-50.
 issues of stock and bonds, 54.
 new, organized under general law, 40.
 number of, 41.
 number of, operating, 41.
 operation of, 41.
- Street railways, cost of, and capital investment in, 46.
 earning five per cent dividends, 294.
 express transportation, 155-172.
 number and mileage of, 41-43.
 (For description of railways, see columns 71-77 of tabulated returns, pp. 372-375.)
- Sturbridge, approval of bridge plans, Hartford and Worcester, 122.
 operation, Hartford and Worcester, 264.
- Subway, Cambridge, approval of plans, 235, 236.
- Sullivan square station, Charlestown, elevated storage yard, 277.
- Summary of railroad accidents, 25-32.
 of railroad returns for years 1906-1907, 5-25.
- Sunday boats, orders permitting, 279-280.
- Sunday trains and steamboats, 279-283.
- Surplus, railroads, 8.
 percentage of, to capital stock, 8.
 (For surplus of the various corporations, see tabulated returns.)
- Surplus, street railways, 44.
 percentage of, to capital stock, 44.
 (For surplus of the various companies, see columns 63, 65, 69 of the tabulated returns, pp. 364-371.)
- Sutton, locations, Worcester and Providence, 253, 254.
- Swansea, location, Providence and Fall River, 248.
 operation, Providence and Fall River, 267.
- Tables compiled from railroad returns, 297-329.
 from street railway returns, 331-387.
- Tail lights, on electric cars, circular, 226.
- Taunton, operation, Old Colony, 267.
- Taunton and Buzzards Bay street railway, dropped from the list, 40.
- Taunton and Pawtucket street railway, joint use of tracks, Norton and Taunton, in Attleborough, 230.
 Interstate Consolidated, in Attleborough, 231.
 locations, Attleborough, 248, 249.
 operation, Attleborough, 268.
 (*See also* returns.)

- Taxes, amount of, railroad (*see tables*).
 street railway (*see tables*).
- Teeling, Richard S., complaint, shelters, Boston Elevated stations, 274, 275.
- Templeton street railway (*see returns*).
- Testing of locomotive boilers, circular, 257, 258.
- Thompson square station, Charlestown, shelter, 274-276.
- Tools, emergency, equipment of Pennsylvania railroad cars with, 293.
- Tracks, joint use of, Boston Elevated, Boston and Northern, in East Boston, 228.
 Boston and Worcester, Newton, Newton and Boston, in Newton, 229.
 Norton and Taunton, Interstate Consolidated, in Attleborough, 229.
 Taunton and Pawtucket, Norton and Taunton, in Attleborough, 230.
 South Middlesex, Milford and Uxbridge in Framingham, 229, 230.
 Springfield, Western Massachusetts, in Springfield and West Springfield, 230.
 Taunton and Pawtucket, Interstate Consolidated, in Attleborough, 231.
- Traffic (*see Volume of Traffic*).
- Train accidents (*see Accidents*).
 service, 71-80.
- Trains, cost of running, per mile (*see Operation*).
 equipment with fire extinguishers, 58, 177, 178.
 Sunday, 280-283.
- Transfers, extension of, by Boston Elevated, 81, 82.
 Boston, Atlantic avenue, 82.
 Scollay square, 81, 82.
 Cambridge, Harvard square, 81.
 by Newton, in Newton, 88.
 by Newton and Boston, Newton, 88, 89.
- Transportation, earnings and expenses of (*see Operation*).
 rates of (*see Fares and Freights*).
- Trespassers, accidents to, 26, 27, 32. (*See also Accidents.*)
- Tunnel, East Boston, night cars, 84, 85.
- Turners Falls, citizens of, service, Connecticut Valley, 86.
- Union Freight railroad (*see returns*).
- Union street railway, communication concerning, to bank commissioner, 294.
 express transportation, Freetown, Lakeville, New Bedford, 165.
 locations, Fairhaven, 249.
 New Bedford, 249.
 operation, certificates preliminary to, Fairhaven, 268.
 New Bedford, 268, 269.
 (See also returns.)
- Uxbridge, locations, Worcester and Providence, 253, 254.
- Uxbridge and Blackstone street railway, bonds, 138.
 operation, Northbridge, 268.
 (See also returns.)
- Ventilation of cars, discussion, 58, 59.
- Vermont and Massachusetts railroad (*see returns*).
 crossing abolition, Fitchburg, 205, 206.
- Viles, Alden E., and others, capital stock, Middlesex and Boston, 136.
 change of name, South Middlesex, to Middlesex and Boston, 136.

- Volume of railroad train mileage, 17, 18.
 - railroad passengers, number carried, 19.
 - average length of journey, 19.
 - total passenger mileage, 19.
 - average passengers per train mile, 19.
 - tons of freight hauled, 20.
 - average length of haul, 20.
 - total freight mileage, 20.
 - average tons, per freight train mile, 20.
 - street railway, car miles run, 49.
 - passengers, number carried, 49.
 - average per mile of track operated, 49.
 - (See *Volume of Traffic*.)
- Volume of traffic, railroad, 17-20.
 - street railway, 48, 49.
 - (See also *Passengers transported*.)
 - (See also tabulated returns, columns 85-88, pp. 380-383.)
- Wages, railroad, cost of, per total train mile, 23.
 - street railway, amount of (*see tables*).
- Wakefield, operation, Boston and Northern, 264.
- Walpole, location, Norfolk and Bristol, 247.
- Waltham, location, Newton, 247.
 - street railway express, Lexington and Boston, 161.
 - Newton, 164.
 - Waltham, 171, 172.
- Waltham street railway, purchase by Newton, 145, 146.
 - street railway express, Waltham, 171, 172.
 - (See also returns.)
- Ware and Brookfield street railway (*formerly Hampshire and Worcester*) (*see returns*).
- Ware River railroad (*see returns*).
- Warren, Brookfield and Spencer street railway, location (*see returns*).
- Watertown, locations, West End, 252.
 - street railway express, Newton, 163, 164.
 - Newton and Boston, 164, 165.
- Webster and Dudley street railway, location, transfer of lease to Worcester and Southbridge, 41.
 - (See also returns.)
- Wellesley, street railway express, Boston and Worcester, 157, 158.
 - Natick and Cochituate, 163.
- Westborough, street railway express, Boston and Worcester, 157, 158.
 - Westborough and Hopkinton, 172.
- Westborough and Hopkinton street railway, express transportation, Hopkinton, Westborough, 172.
 - (See also returns.)
- West Bridgewater, street railway express, Old Colony, 169, 170.
- West Deerfield, investigation of accident, Boston and Maine, 225, 226.
- West End street railway, bonds, 139.
 - communication concerning, to bank commissioner, 294.
 - extension of time for crossing, New York, New Haven and Hartford, Boston, 182.

- West End street railway, locations, 249, 252.
 operation, 269.
 service, East Boston, 83, 84.
 East Boston tunnel, 84, 85.
 Malden, 85.
 stock, issue and application of proceeds, 139.
 sale at auction, 139, 140.
 (See also returns.)
 (*See also Boston Elevated Railway.*)
- Western Massachusetts street railway, fares, Westfield, 91.
 joint use of tracks, Springfield and West Springfield, 230.
 locations, Westfield, 252, 254.
 purchase of Woronoco, 146, 147.
 (See also returns.)
- West Newbury, citizens of, service, Boston and Northern, Citizens Electric, 90, 91.
- Westfield, fares, Western Massachusetts, 91.
 locations, Western Massachusetts, 252, 254.
- Westford, emergency crossing, Boston and Maine, by Lowell and Fitchburg, 182.
 operation, Lowell and Fitchburg, 265.
- Weston, whistling, Boston and Maine, 261.
- Westport, location, Dartmouth and Westport, 244.
- West Springfield, joint use of tracks, Springfield, Western Massachusetts, 230.
- Weymouth, operation, Old Colony, 267.
 service, Old Colony, 91, 92.
- Whately, express transportation, Connecticut Valley, 159, 160.
- Wheel guards, street railway, circular, 174-176.
 discussion, 60.
- Whistling, of locomotives, regulation of, Boston and Albany, Framingham, 260.
 Boston and Maine, Reading, 260, 261.
 Weston, 261.
- White, Clinton, designation on commission, alteration of crossing, Agawam, 220.
- Whitman, street railway express, Brockton and Plymouth, 158.
- Whitney, Henry M., private railroad, Cambridge, 183.
- Williamstown, operation, Berkshire, 262.
- Wilmington (Junction), speed, Boston and Maine, restrictions removed, 270.
- Winchester, location, Boston and Northern, 243.
 service to Woburn, Boston and Maine, 78, 79.
- Woburn, service, to Winchester, Boston and Maine, 78, 79.
- Woonsocket street railway (of Rhode Island), dropped from Massachusetts list, 40.
- Worcester, abolition grade crossing, Boston and Albany, Norwich and Worcester, Providence and Worcester, 207, 208.
 crossing protection, New York, New Haven and Hartford, 191.
 locations, Worcester Consolidated, 252.
- Worcester Consolidated street railway, bonds, 141.
 locations, Worcester, 252.
 (See also returns.)

- Worcester and Blackstone Valley street railway, location, Northbridge, 252.
operation, Northbridge, 269.
(See also returns.)
- Worcester and Holden street railway, stock, 142.
(See also returns.)
- Worcester and Northern street railway, construction, extension of time for, 292.
(See also returns.)
- Worcester and Providence street railway, construction, extension of time for, 292.
locations, Douglas, 253, 254.
Millbury, 253, 254.
Sutton, 253, 254.
Uxbridge, 253, 254.
(See also returns.)
- Worcester and Shrewsbury railroad (see returns).
- Worcester and Shrewsbury street railway (see returns).
- Worcester and Southbridge street railway, Charlton, accident investigation, 224, 225.
fares, Oxford, 89.
operating contract, Hartford and Worcester, 41, 231.
stock, 142.
transfer of leases to, 41.
(See also returns.)
- Worcester and Webster street railway, fares, Oxford, 89.
transfer of lease to Worcester and Southbridge, 41.
(See also returns.)
- Worcester, Nashua and Rochester railroad (see returns).
- Woronoco street railway, purchase by Western Massachusetts, 146, 147.
(See also returns.)

COMMISSIONERS' REPORT.

PART I.

RAILROAD CORPORATIONS AND STREET
RAILWAY COMPANIES.

Commonwealth of Massachusetts.

*To the Honorable Senate and House of Representatives in General Court
assembled.*

We respectfully submit the thirty-ninth annual report of
the Board of Railroad Commissioners : —

RAILROADS.

Returns for the year ending June 30, 1907, have been received from forty-two railroad corporations, two less than last year.

The Danvers and the Newburyport having been consolidated with the Boston and Maine have made no returns and have been dropped from the list.

During the past year there has been returned as constructed a net increase in the length of railroad line located in this state of 5.265 miles:—

New England Railroad, Needham Branch, from West Roxbury to Needham Junction,	4.530
Old Colony Railroad, connection with New England Railroad in Boston, . . . . .	.870
	<hr style="width: 50px; margin-left: auto;"/> 5.400
Less a decrease by re-measurement, . . . . .	.135
	<hr style="width: 50px; margin-left: auto;"/>
Additional miles,	5.265

There was also an increase of 8.232 miles of second main track, 1.560 miles of third main track, and .950 of a mile of fourth main track, and an increase of 53.343 miles of side track.

There are now in Massachusetts 2,110.925 miles of main and branch railroad track.

The total length of railroad track within the state, including second, third and fourth main track and side track, is 4,618.234 miles.

STATISTICS.

BOSTON, Jan. 1, 1908.

Board of Railroad Commissioners.

GENTLEMEN:—I submit the following compilations of statistics from the returns of the several railroad companies to the Board for the year ending June 30, 1907.

In the following tables the 4.200 miles of road owned by the Hartford & Connecticut Western and operated by the Central New England are not included.

The following table gives the length of railroad line and track in this Commonwealth June 30, 1907, as compared with the previous year: —

Railroad Mileage in Massachusetts, 1906 and 1907.

RAILROAD MILEAGE.	1906.	1907.	Increase.
	Miles.	Miles.	Miles.
Length of main and branch line, .	2,105.660	2,110.925	5.265
Length of second track, . . .	884.937	893.169	8.232
Length of third track, . . .	41.360	42.920	1.560
Length of fourth track, . . .	35.170	36.120	.950
Length of side track, . . .	1,481.757	1,535.100	53.343
Total reckoned as single track,	4,548.884	4,618.234	69.350

Mileage Owned.

The total length of railroad line *owned* by the Massachusetts companies *in* and *out* of the state is 4,011.775¹ miles; and the total length of railroad track so owned is 8,191.874³ miles. The miles of main and branch line, of second, third and fourth main track, and of side track, owned June 30, 1907, and the increase over the previous year, are stated in the following table: —

Mileage Owned by Massachusetts Companies, 1906 and 1907.

MILEAGE OWNED.	1906.	1907.	Increase.
	Miles.	Miles.	Miles.
Length of main and branch line, .	3,950.690 ¹	4,011.775 ¹	61.085
Length of second track, . . .	1,389.087	1,409.669	20.582
Length of third track, . . .	100.980	109.150	8.170
Length of fourth track, . . .	94.790	96.380	1.590
Length of side track, . . .	2,479.887 ²	2,564.900 ⁴	85.013
Total reckoned as single track,	8,015.434 ³	8,191.874 ⁵	176.440

¹ Includes 18.100 miles electric street railway.

² Includes 1.150 miles electric street railway.

³ Includes 19.250 miles electric street railway track.

⁴ Includes 1.140 miles electric street railway.

⁵ Includes 19.240 miles electric street railway track.

Mileage Operated.

The length of railroad line *operated* by the Massachusetts companies, *within* and *without* the state, including roads operated under lease or contract as well as roads owned, is 4,925.739¹ miles; and the total length of track so operated is 9,615.307⁵ miles, — as shown in detail, with the increase and decrease for the year, in the next table: —

Mileage Operated by Massachusetts Companies, 1906 and 1907.

MILEAGE OPERATED.	1906.	1907.	Increase.
	Miles.	Miles.	Miles.
Length of main and branch line, . . .	4,931.960 ¹	4,925.739 ¹	6.221*
Length of second track,	1,482.467	1,498.379	15.912
Length of third track,	116.030	124.200	8.170
Length of fourth track,	108.490	110.080	1.590
Length of side track,	2,887.817 ²	2,956.909 ⁴	69.092
Total reckoned as single track,	9,526.764 ³	9,615.307 ⁵	88.543

¹ Includes 49.580 miles electric street railway.

² Includes 3.490 miles electric street railway.

³ Includes 49.470 miles electric street railway track.

⁴ Includes 3.430 miles electric street railway.

⁵ Includes 49.410 miles electric street railway track. * Decrease.

ASSETS AND LIABILITIES.

The gross assets of the companies, June 30, 1907, were \$687,423,-137.21. The several classes of assets, and the increase or decrease in each class as compared with 1906, appear in the following table: —

Gross Assets, June 30, 1906 and 1907.

ASSETS.	1906.	1907.	Increase.
Construction,	\$309,558,390	\$326,077,853	\$16,519,463
Equipment,	45,981,040	55,056,752	9,075,712
Land and buildings,	1,573,444	1,587,463	14,019
Stocks in other companies, . . .	63,581,539	66,817,877	3,236,338
Bonds in other companies, . . .	15,786,077	26,629,358	10,843,281
Other permanent property, . . .	11,752,817	78,522,541	66,769,724
Cash and current assets, . . .	74,891,914	112,133,603	37,241,689
Miscellaneous assets,	33,121,873	20,597,690	12,524,183*
Gross assets,	\$556,247,094	\$687,423,137	\$131,176,043

* Decrease.

The gross liabilities at the same date, including capital stock but excluding sinking and other special funds, were \$634,171,728.66. The several kinds of liabilities, and the amount of each as compared with 1906, are shown in the following table: —

Gross Liabilities, June 30, 1906 and 1907.

LIABILITIES.	1906.	1907.	Increase.
Capital stock,	\$242,033,936	\$283,509,391	\$41,475,455
Funded debt,	213,182,069	297,342,100	84,160,031
Real estate mortgages,	683,300	60,000	623,300*
Current liabilities,	41,158,344	34,983,292	6,175,052*
Accrued liabilities,	13,911,482	18,276,946	4,365,464
Gross liabilities, ¹	\$510,969,131	\$634,171,729	\$123,202,598
Surplus, ²	45,277,963	53,251,408	7,973,445
Sinking and special funds, ³	10,205,186	10,760,987	555,801

¹ Exclusive of sinking and other special funds.

³ Included in surplus above.

² Includes premium on sales of stock and bonds.

* Decrease.

A comparison of the foregoing tables shows that there was an increase over the previous year of \$131,176,043 in gross assets and an increase of \$123,202,598 in gross liabilities, — a balance of \$7,973,445 in favor of assets, enlarging by that amount the aggregate surplus of the companies.

Gross Assets, Liabilities and Surplus for Ten Years, 1898–1907.

YEARS.	Gross Assets.	Gross Liabilities.	Surplus.	Per Cent Surplus to Capital.
1898,	\$390,322,164	\$367,679,526	\$22,642,638	11.01
1899,	400,265,132	375,363,693	24,901,439	11.68
1900,	405,188,330	377,008,891	28,179,439	13.03
1901,	419,743,521	385,417,287	34,326,234	16.32
1902,	418,298,274	383,106,669	35,191,605	16.70
1903,	432,780,849	394,277,139	38,503,710	16.33
1904,	456,996,116	416,593,865	40,402,251	17.02
1905,	484,710,681	441,087,297	43,623,384	18.31
1906,	556,247,094	510,969,131	45,277,963	18.71
1907,	687,423,137	634,171,729	53,251,408	18.78

The gross assets, the gross liabilities including capital stock, and the surplus of the companies, with the percentage of surplus to capital stock, at the end of each of the last ten years, are given in the preceding table.

FUNDED AND FLOATING DEBT.

The aggregate funded debt of the companies, June 30, 1907, was \$297,342,100.00 — an increase of \$84,160,031.09 over the previous year, resulting from additions and deductions as follows: —

Additions: —

Fitchburg,	\$500,000 00
New Haven & Northampton,	1,308,000 00
New York, New Haven & Hartford,	85,007,275 00

Total additions to funded debt,	\$36,815,275 00
---	-----------------

Deductions: —

Boston & Lowell,	\$2,000,000 00
Boston & Maine,	224,243 91
Danvers (consolidated with Boston & Maine),	125,000 00
Newburyport (consolidated with Boston & Maine),	300,000 00
Hoosac Tunnel & Wilmington,	6,000 00

Total deductions from funded debt,	\$2,655,243 91
--	----------------

Net increase of funded debt,	\$84,160,031 09
--	-----------------

Unfunded Debt.

The amount of real estate mortgages outstanding June 30, 1907, was \$60,000.00 — a decrease of \$623,300.00 from the previous year.

The total unfunded debt, including the above mortgages, was \$53,320,237.96 — a decrease of \$2,432,888.25 from the previous year.

The gross debt, funded and unfunded, was \$350,662,337.96 — an increase of \$81,727,142.84 over the previous year.

The net debt (the gross debt less \$112,133,602.43 of cash and current assets) was \$238,528,735.53 — an increase of \$44,485,454.67 over the previous year.

In computing the net debt, the sum of \$20,597,690.35 returned as "miscellaneous assets," covering materials and supplies on hand, etc., is not included with cash and current assets in the deduction from gross debt.

The funded debt, unfunded debt, gross debt and net debt, for each of the last ten years, are shown in the following table: —

Funded, Unfunded, Gross and Net Debt, 1898-1907.

YEARS.	Funded Debt.	Unfunded Debt. ¹	Gross Debt.	Net Debt. ²
1898, . . .	\$140,554,407	\$21,358,612	\$161,913,019	\$141,997,181
1899, . . .	138,001,534	24,106,877	162,108,411	138,565,122
1900, . . .	136,024,534	24,771,094	160,795,628	135,577,061
1901, . . .	148,479,015	26,632,386	175,111,401	137,698,384
1902, . . .	149,777,542	22,602,341	172,379,883	136,471,224
1903, . . .	133,435,355	25,007,318	158,442,673	117,562,606
1904, . . .	152,841,358	26,328,621	179,169,979	142,978,537
1905, . . .	159,098,294	43,765,117	202,863,411	166,583,544
1906, . . .	213,182,069	55,753,126	268,935,195	194,043,281
1907, . . .	297,342,100	53,320,238	350,662,338	238,528,736

¹ Including real estate mortgages.² Gross debt less cash and current assets.

CAPITAL STOCK AND DIVIDENDS.

The aggregate capital stock of the thirty-nine Massachusetts corporations, June 30, 1907, was \$283,509,390.70 — a net increase of \$41,475,454.98 over the previous year, resulting from additions and deductions as follows: —

Additions: —

Boston & Maine,	\$3,234,295 00
Connecticut River,	8,000 00
New York, New Haven & Hartford,	38,521,000 00

Total additions to capital stock,	\$41,763,295 00
---	-----------------

Deductions: —

Danvers (consolidated with Boston & Maine),	\$67,500 00
Newburyport (consolidated with Boston & Maine),	220,340 02

Total deductions from capital stock,	\$287,840 02
--	--------------

Net increase of capital stock,	\$41,475,454 98
--	-----------------

The total amount of dividends declared the last year was \$16,751,-279.16—an increase of \$1,200,172.16 over the previous year. Twenty-six of the thirty-nine corporations declared dividends varying in rate from 2 to 10 per cent, and thirteen paid no dividends.

Four companies paid 10 per cent; one paid $9\frac{1}{2}$ per cent; two paid 9 per cent; one paid $8\frac{3}{4}$ per cent; three paid 8 per cent; one paid 7 per cent on common and 6 per cent on preferred; four paid 7 per cent; two paid 6 per cent; one paid $5\frac{3}{4}$ per cent; three paid 5 per cent; one paid 4 per cent; one paid 3 per cent; one paid $2\frac{1}{2}$ per cent; and one paid 2 per cent.

The amount of capital stock of the twenty-six dividend paying companies was \$281,699,090.70¹, on which the average rate of dividend was 5.95 per cent.

The following table gives the total capital stock outstanding at the end of the year; the net income available for dividends (after paying all expenses, interest, taxes, rentals and other charges); the amount of dividends declared; and the average percentage of dividends to total capital stock, for each of the last ten years:—

Capital Stock, Net Income and Dividends, 1898–1907.

YEARS.	Capital Stock.	Net Divisible Income.	Dividends Declared.	Percentage to Total Capital Stock.
1898, . . .	\$205,766,507	\$11,823,827	\$11,599,462	5.64
1899, . . .	213,255,282	12,798,630	12,143,749	5.69
1900, . . .	216,213,263	13,665,720	12,498,947	5.78
1901, . . .	210,305,886	13,529,627	13,049,306	6.20
1902, . . .	210,726,786	13,818,341	13,201,264	6.26
1903, . . .	235,834,466	13,778,968	13,495,189	5.97
1904, . . .	237,423,886	14,821,360	14,985,816	6.35
1905, . . .	238,223,886	15,679,266	15,431,930	6.48
1906, . . .	242,033,936	16,348,523	15,551,107	6.43
1907, . . .	283,509,391	17,720,935	16,751,279	5.91

¹ Including common stock on which, in the case of two of these companies, no dividend was paid.

INCOME AND EXPENDITURES.

The total income of the companies from all sources, for the year ending June 30, 1907, was \$126,743,180.70, and the total expenditures, including dividends paid, were \$125,773,525.11 — showing a net surplus for the year of \$969,655.59 to be added to surplus account.

The sources of total income, and the amount derived from each source as compared with the previous year, were as follows: —

Total Income, 1906 and 1907.

INCOME.	1906.	1907.	Increase.
Gross earnings from operation, . . .	\$105,954,452 ¹	\$111,433,938 ²	\$5,479,486
Rentals from lease of road, . . .	10,755,547	10,748,322	7,225*
Income from other sources, . . .	3,023,552	4,560,921	1,537,369
Total income,	\$119,733,551	\$126,743,181	\$7,009,630

* Decrease.

¹ Includes \$203,891 from electric street railways.

² Includes \$214,629 from electric street railways.

The items of the total expenditures, with the surplus for the year, and the increase or decrease in each item as compared with the previous year, are shown in the following table: —

Total Expenditures, 1906 and 1907.

EXPENDITURES.	1906.	1907.	Increase.
Expenses of operation,	\$73,885,985 ¹	\$80,912,538 ²	\$7,026,553
Interest on debt and loans, . . .	8,140,914	9,988,367	1,847,453
Taxes,	5,954,528	5,738,581	215,947*
Rentals of leased roads,	11,695,915	11,594,836	101,079*
Other charges on income,	3,707,686	787,924	2,919,762*
Dividends paid,	15,551,107	16,751,279	1,200,172
Total expenditures,	\$118,936,135	\$125,773,525	\$6,837,390
Surplus for the year,	797,416	969,656	172,240

* Decrease.

¹ Includes \$213,898 for operating electric street railways.

² Includes \$214,007 for operating electric street railways.

EARNINGS AND EXPENSES OF OPERATION.

The gross earnings and expenses of operation the last year are classified, and compared with those of the previous year, in the following table: —

Gross Earnings and Expenses of Operation, 1906 and 1907.

EARNINGS AND EXPENSES.	1906.	1907.	Increase.
Revenue from passengers, . . .	\$39,799,834 ¹	\$41,467,240 ⁴	\$1,667,406
from mails, express, etc., . . .	7,062,182	7,562,746	500,564
Revenue from freight,	56,863,495	60,149,356	3,285,861
from elevators, etc.,	1,043,516	1,077,275	33,759
Other earnings from operation, . .	1,185,425	1,177,322	8,103*
Gross earnings from operation, . .	\$105,954,452 ²	\$111,433,939 ⁵	\$5,479,487
Operating expenses,	73,885,985 ³	80,912,538 ⁶	7,026,553
Net earnings from operation, . . .	\$32,068,467	\$30,521,401	\$1,547,066*

* Decrease.

¹ Includes \$203,386 from electric street railways.

² Includes \$203,891 from electric street railways.

³ Includes \$213,898 for electric street railways.

⁴ Includes \$214,116 for electric street railways.

⁵ Includes \$214,629 for electric street railways.

⁶ Includes \$214,007 for electric street railways.

The next two tables show the revenue from passenger service and freight service respectively, the other earnings from operation, and the gross earnings from operation, on each of the three leading roads for the last year, and on all of the roads for each of the past ten years: —

Gross Earnings from Operation (Three Roads) in 1907.

RAILROAD COMPANIES.	Revenue from Passenger Service.	Revenue from Freight Service.	Other Earnings from Operation.	Gross Earnings from Operation.
Boston & Albany,	\$5,518,839	\$6,578,464	\$392,143	\$12,489,446
Boston & Maine,	15,623,495 ¹	25,212,843	288,919	41,125,257
N. Y., N. H. & Hartford,	26,758,929	28,386,704	456,303	55,601,936

¹ Includes \$214,629 from electric street railways.

Gross Earnings from Operation for Ten Years, 1898-1907.

YEARS.	Revenue from Passenger Service.	Revenue from Freight Service.	Other Earnings from Operation.	Gross Earnings from Operation.
1898, . . .	\$34,680,057	\$38,204,984	\$714,493	\$73,599,534
1899, . . .	35,325,236	39,310,129	794,697	75,430,062
1900, . . .	37,732,243	43,625,099	833,951	82,191,293
1901, . . .	37,788,899	43,883,434	713,253	82,385,586
1902, . . .	39,959,789	45,984,272	976,504	86,920,565
1903, . . .	42,524,082	49,717,755	1,084,095	93,325,932
1904, . . .	43,248,333	51,000,810	1,031,205	95,280,348
1905, . . .	44,351,142	53,439,440	1,108,643	98,899,225
1906, . . .	46,862,016	57,907,011	1,185,425	105,954,452
1907, . . .	49,029,986	61,226,631	1,177,322	111,433,939

Ratio of Operating Expenses to Gross Earnings.

The following tables give in like manner the gross earnings from operation, the operating expenses; the ratio of operating expenses to gross earnings, and the net earnings from operation of the three leading companies for the last year, and of all the companies for ten years: —

Ratio of Operating Expenses to Gross Earnings (Three Roads) in 1907.

RAILROAD COMPANIES.	Gross Earnings from Operation.	Operating Ex- penses.	Percentage of Expenses to Earnings.	Net Earnings from Operation.
Boston & Albany, . .	\$12,489,446	\$10,154,199	81.30	\$2,335,247
Boston & Maine, . .	41,125,256 ¹	30,968,397 ²	75.30	10,156,859
N. Y., N. H. & Hartford,	55,601,936	37,850,082	68.07	17,751,854

¹ Includes \$214,629 from electric street railways.

² Includes \$214,007 for electric street railways.

Ratio of Operating Expenses to Gross Earnings, 1898-1907.

YEARS.	Gross Earnings from Operation.	Operating Expenses.	Percentage of Expenses to Earnings.	Net Earnings from Operation.
1898, . . .	\$73,599,534	\$50,890,883	69.28	\$22,708,651
1899, . . .	75,430,061	51,490,351	68.26	23,939,710
1900, . . .	82,191,293	56,900,642	69.23	25,290,651
1901, . . .	82,385,586	57,293,591	69.54	25,091,995
1902, . . .	86,920,565	61,355,821	70.59	25,564,744
1903, . . .	93,325,932	67,774,864	72.62	25,551,068
1904, . . .	95,280,348	69,145,285	72.57	26,135,063
1905, . . .	98,899,225	71,393,485	72.19	27,505,740
1906, . . .	105,954,452	73,885,985	69.73	32,068,467
1907, . . .	111,433,938	80,912,538	72.61	30,521,400

Earnings and Expenses per Mile of Road Operated.

The average gross earnings and expenses of operation, and the net earnings from operation, per total mile of road operated by the three leading companies for the last year, and by all of the companies for the past ten years, are shown in the following tables:—

Earnings and Expenses per Mile of Road Operated (Three Roads) in 1907.

RAILROAD COMPANIES.	Gross Earnings.	Operating Expenses.	Net Earnings.
Boston & Albany, . . .	\$31,821	\$25,871	\$5,950
Boston & Maine, . . .	18,247 ¹	13,717 ¹	4,530 ¹
N. Y., N. H. & Hartford, . .	26,989	18,372	8,617

¹ Not including electric street railways.

Earnings and Expenses per Mile of Road Operated, 1898-1907.

YEARS.	Gross Earnings.	Operating Expenses.	Net Earnings.	YEARS.	Gross Earnings.	Operating Expenses.	Net Earnings.
1898, .	\$15,571	\$10,766	\$4,805	1903, .	\$19,020	\$13,813	\$5,207
1899, .	15,773	10,767	5,006	1904, .	19,304	14,009	5,295
1900, .	16,894	11,696	5,198	1905, .	19,931	14,388	5,543
1901, .	16,864	11,728	5,136	1906, .	21,483	14,981	6,502
1902, .	17,785	12,554	5,231	1907, .	22,623	16,427	6,196

Earnings and Expenses per Revenue-Train Mile.

The average gross earnings and expenses of operation, and the net earnings from operation, per total mile run by trains earning revenue, on all of the roads, for each of the last ten years, have been as follows:—

Earnings and Expenses per Total Revenue-Train Mile, 1898–1907.

YEARS.	Gross Earnings.	Operating Expenses.	Net Earnings.	YEARS.	Gross Earnings.	Operating Expenses.	Net Earnings.
1898, .	\$1.637	\$1.132	\$0.505	1903, .	\$1.887	\$1.370	\$0.517
1899, .	1.653	1.128	.525	1904, .	1.864	1.352	.512
1900, .	1.791	1.240	.551	1905, .	1.936	1.398	.538
1901, .	1.825	1.269	.556	1906, .	2.020	1.408	.612
1902, .	1.853	1.308	.545	1907, .	2.024	1.470	.554

Earnings and Expenses per Revenue-Train Mile (Three Roads) in 1907.

RAILROAD COMPANIES.	Gross Earnings per Passenger-Train Mile.	Gross Earnings per Freight-Train Mile.	PER TOTAL REVENUE-TRAIN MILE.		
			Gross Earnings.	Operating Expenses.	Net Earnings.
Boston & Albany, . .	\$1.527	\$2.232	\$1.903	\$1.547	\$0.356
Boston & Maine, . .	1.264 ¹	2.494	1.835	1.379	.456
N. Y., N. H. & Hartford,	1.667	3.523	2.306	1.570	.736

¹ Not including electric street railways.

The average gross earnings from operation per passenger-train mile and per freight-train mile, and the gross and net earnings and operating expenses per total revenue-train mile, on the three leading railroads of the state, are given for the last year in the preceding table.

The *expenses* of operation per passenger-train mile and per freight-train mile, respectively, cannot be stated, because the operating expenses of the passenger department are not kept by the companies separately from those of the freight department.

Earnings and Expenses per Total Train Mile.

The average gross earnings and operating expenses per train mile of all trains, including switching, construction and other trains not earning revenue, on all of the roads for the last ten years, and on each of the three leading roads for the last two years, are stated in the following tables:—

Earnings and Expenses per Total Train Mile, 1898-1907.

YEARS.	Gross Earnings.	Operating Expenses.	Net Earnings.	YEARS.	Gross Earnings.	Operating Expenses.	Net Earnings.
1898, .	\$1.304	\$0.902	\$0.402	1903, .	\$1.383	\$1.004	\$0.379
1899, .	1.335	.911	.424	1904, .	1.381	1.002	.379
1900, .	1.392	.964	.428	1905, .	1.462	1.055	.407
1901, .	1.350	.939	.411	1906, .	1.527	1.065	.462
1902, .	1.359	.959	.400	1907, .	1.509	1.095	.414

Earnings and Expenses per Total Train Mile (Three Roads) in 1906 and 1907.

RAILROAD COMPANIES.	GROSS EARNINGS.		OPERATING EXPENSES.		NET EARNINGS.	
	1906.	1907.	1906.	1907.	1906.	1907.
Boston & Albany, . .	\$1.865	\$1.652	\$1.197	\$1.343	\$0.668	\$0.309
Boston & Maine, . .	1.263 ¹	1.253 ¹	.943 ¹	.942 ¹	.320	.311
N. Y., N. H. & Hartford,	1.763	1.774	1.172	1.208	.591	.566

¹ Not including electric street railways.

VOLUME OF TRAFFIC.

Train Mileage.

The total number of miles run by passenger trains (including in the passenger train mileage one-quarter of the mixed train mileage) the last year, on the roads of all the companies, was 33,404,569 — an increase of 1,474,544 miles over the previous year; by freight trains (including three-quarters of the mixed train mileage), 21,638,150 — an increase of 1,106,429 miles; and by all other trains 18,847,553 — an increase of 1,922,980 miles, making the total number of miles run

by trains of all kinds 73,890,272 — an increase of 4,503,953 miles over the previous year.

The mileage of passenger, freight and other trains, for each of the last ten years, is stated in the following table: —

Train Mileage for Ten Years, 1898-1907.

YEARS.	MILES RUN BY			Total Train Mileage.
	Passenger Trains.	Freight Trains.	Other Trains.	
1898, . . .	27,046,501	17,721,128	11,666,838	56,434,467
1899, . . .	27,749,110	17,691,524	11,067,915	56,508,549
1900, . . .	28,220,270	17,680,269	13,151,881	59,052,420
1901, . . .	28,528,070	16,624,823	15,888,988	61,041,881
1902, . . .	29,651,287	17,261,795	17,032,739	63,945,821
1903, . . .	30,925,409	18,523,087	18,031,805	67,480,301
1904, . . .	31,876,672	19,250,202	17,874,984	69,001,858
1905, . . .	31,560,016	19,518,636	16,565,460	67,644,112
1906, . . .	31,930,025	20,531,721	16,924,573	69,386,319
1907, . . .	33,404,569	21,638,150	18,847,553	73,890,272

The next table shows the train mileage on each of the three leading railroads of the state for the last year: —

Train Mileage (Three Roads) in 1907.

RAILROAD COMPANIES.	MILES RUN BY			Total Train Mileage.
	Passenger Trains.	Freight Trains.	Other Trains.	
Boston & Albany, . .	3,614,850	2,946,874	999,613	7,561,337
Boston & Maine, . .	12,189,684	10,109,455	10,361,141	32,660,280
N. Y., N. H. & Hartford,	16,051,010	8,056,102	7,221,980	31,329,092

Passenger Traffic.

The total number of passengers carried the last year was 146,821,836¹ — an increase of 8,987,836 passengers over the previous year. Each passenger on the steam roads travelled on the average a distance of 17.49 miles, making the total passenger mileage 2,505,631,328.²

¹ Includes 3,569,160 on electric street railways.

² Not including electric street railways.

The total volume of passenger traffic for each of the last ten years is shown in the following table : —

Passenger Mileage for Ten Years, 1898-1907.

YEARS.	Passengers Carried.	Average Journey. (Miles.)	Total Passenger Mileage.	Average Passengers per Train Mile.
1898, . . .	101,940,722	16.47	1,678,640,940	63
1899, . . .	102,043,980	16.82	1,716,081,605	62
1900, . . .	108,768,303	17.08	1,858,253,279	66
1901, . . .	108,758,528	17.09	1,859,200,923	65
1902, . . .	115,645,897	17.14	1,982,170,406	67
1903, . . .	123,162,793	17.16	2,112,874,995	68
1904, . . .	124,483,665 ¹	17.49 ²	2,133,524,260 ²	67 ²
1905, . . .	127,439,566 ³	17.75 ²	2,205,586,782 ²	70 ²
1906, . . .	137,834,000 ⁴	17.41 ²	2,342,560,774 ²	73 ²
1907, . . .	146,821,836 ⁵	17.49 ²	2,505,631,328 ²	75 ²

¹ Includes 2,567,868 on electric street railways.

² Not including electric street railways.

³ Includes 3,205,299 on electric street railways.

⁴ Includes 3,249,179 on electric street railways.

⁵ Includes 3,569,160 on electric street railways.

The passenger mileage on the three leading railroads during the last year was as follows : —

Passenger Mileage (Three Roads) in 1907.

RAILROAD COMPANIES.	Passengers Carried.	Average Journey. (Miles.)	Total Passenger Mileage.	Average Passengers per Train Mile.
Boston & Albany, .	11,182,911	25.18	281,540,774	78
Boston & Maine, .	46,126,992 ¹	17.92 ²	762,517,704 ²	63 ²
N. Y., N. H. & Hartford,	75,333,816	18.21	1,371,516,126	85

¹ Includes 3,569,160 on electric street railways.

² Not including electric street railways.

Freight Traffic.

The total number of tons of freight hauled on all the roads the last year was 53,806,796 — an increase of 3,342,129 tons over the previous year. Each ton of freight was hauled on the average a distance of 93.58 miles, making the total freight mileage 5,035,305,109 — an increase of 421,431,171 tons hauled one mile, over the previous year.

Freight Mileage for Ten Years, 1898-1907.

YEARS.	Tons of Freight Hauled.	Average Haul. (Miles.)	Total Freight Mileage.	Average Tons per Train Mile.
1898,	35,338,724	85.54	3,022,770,499	172
1899,	36,228,084	88.65	3,211,643,434	182
1900,	40,316,711	85.81	3,459,439,263	195
1901,	39,463,814	89.07	3,515,066,493	211
1902,	41,440,170	86.70	3,592,963,862	208
1903,	43,992,978	89.31	3,928,993,919	212
1904,	43,727,514	90.22	3,945,026,293	205
1905,	45,874,649	92.31	4,234,491,283	217
1906,	50,464,667	91.43	4,613,873,938	225
1907,	53,806,796	93.58	5,035,305,109	233

The preceding table gives the total volume of freight traffic for each of the last ten years.

The next table gives the freight mileage on the three leading roads for the last year: —

Freight Mileage (Three Roads) in 1907.

RAILROAD COMPANIES.	Tons of Freight Hauled.	Average Haul. (Miles.)	Total Freight Mileage.	Average Tons per Train Mile.
Boston & Albany, .	6,798,201	110.02	747,943,525	254
Boston & Maine, .	23,262,949	98.74	2,296,970,964	227
N.Y., N.H. & Hartford,	21,370,230	90.20	1,927,686,950	239

FARES AND FREIGHTS.

Passenger Fares.

The average passenger fare per mile on the Massachusetts railroads for each of the last thirty years, as ascertained from the annual returns to the Board, is given in the following table: —

Average Passenger Fare per Mile (All Massachusetts Roads) for 30 Years, 1878–1907.

YEARS.	Fares.	YEARS.	Fares.	YEARS.	Fares.
	Cents.		Cents.		Cents.
1878, . .	2.18	1888, . .	1.90	1898, . .	1.78
1879, . .	2.11	1889, . .	1.87	1899, . .	1.77
1880, . .	2.05	1890, . .	1.82	1900, . .	1.75
1881, . .	2.02	1891, . .	1.83	1901, . .	1.75
1882, . .	2.00	1892, . .	1.83	1902, . .	1.73
1883, . .	2.00	1893, . .	1.83	1903, . .	1.73
1884, . .	1.92	1894, . .	1.80	1904, . .	1.72 ¹
1885, . .	1.88	1895, . .	1.78	1905, . .	1.70 ¹
1886, . .	1.88	1896, . .	1.79	1906, . .	1.70 ¹
1887, . . .	1.85	1897, . .	1.80	1907, . .	1.65 ¹

¹ Does not include electric street railways. *

The following table gives the average passenger fares per mile on the *five* leading Massachusetts railroads, taken singly and as a group, for the years 1870, 1880 and 1890, and for each of the last three years, 1905 to 1907 inclusive: —

Average Passenger Fare per Mile (Five Roads) in 1870, 1880, 1890 and 1905–1907.

RAILROAD COMPANIES.	1870.	1880.	1890.	1905.	1906.	1907.
	Cents.	Cents.	Cents.	Cents.	Cents.	Cents.
Boston & Albany, . . .	2.78	2.09	1.86	1.64	1.66	1.61
Boston & Maine, . . .	2.14	2.14	1.83	1.76	1.77 ¹	1.75
Fitchburg,	2.56	1.88	1.91	—	—	—
New England,	—	2.12	1.96	—	—	—
N. Y., N. H. & Hartford, . .	2.38	1.92	1.73	1.70	1.68	1.62
All five companies, . . .	2.40	2.01	1.81	1.71	1.71	1.66

¹ Does not include electric street railways.

Freight Rates.

In the tables which follow, the average rates per ton mile for the transportation of merchandise on the railroads of this state are shown for the same years and intervals of years, for all of the roads and for the same group of roads, as in the preceding tables of passenger fares.

The first table gives the average freight rate per ton mile on all of the roads for each of the last thirty years:—

Average Freight Rate per Ton Mile (All Massachusetts Roads) for 30 Years, 1878–1907.

YEARS.	Rates.	YEARS.	Rates.	YEARS.	Rates.
	Cents.		Cents.		Cents.
1878, . .	1.92	1888, . .	1.55	1898, . .	1.22
1879, . .	1.82	1889, . .	1.50	1899, . .	1.18
1880, . .	1.84	1890, . .	1.45	1900, . .	1.22
1881, . .	1.71	1891, . .	1.42	1901, . .	1.20
1882, . .	1.71	1892, . .	1.36	1902, . .	1.24
1883, . .	1.72	1893, . .	1.39	1903, . .	1.23
1884, . .	1.64	1894, . .	1.33	1904, . .	1.27
1885, . .	1.59	1895, . .	1.28	1905, . .	1.14
1886, . .	1.64	1896, . .	1.28	1906, . .	1.23
1887, . .	1.62	1897, . .	1.25	1907, . .	1.19

The following table shows the average rate per ton mile on the *five* leading railroads of the state, taken singly and as a group, in 1870, 1880 and 1890, and for each of the last three years, 1905 to 1907:—

Average Freight Rate per Ton Mile (Five Roads) in 1870, 1880, 1890 and 1905–1907.

RAILROAD COMPANIES.	1870.	1880.	1890.	1905.	1906.	1907.
	Cents.	Cents.	Cents.	Cents.	Cents.	Cents.
Boston & Albany, . . .	2.19	1.21	1.11	0.93	0.90	0.88
Boston & Maine, . . .	4.45	2.56	1.76	1.15	1.16	1.08
Fitchburg,	4.81	1.37	0.99	—	—	—
New England,	—	2.86	1.22	—	—	—
N. Y., N. H. & Hartford, . .	4.09	2.41	2.07	1.41	1.41	1.44
All five companies, . . .	2.95	1.65	1.44	1.23	1.23	1.19

COST OF REPAIRS, WAGES AND FUEL.

The average cost of certain specified items of repairs and renewals, and also of wages and fuel, per total train mile, on all of the roads for the past six years, and on each of the three leading roads for the last year, appears in the following tables:—

Cost of Repairs, etc., per Total Train Mile, 1902–1907.

REPAIRS, WAGES, ETC.	1902.	1903.	1904.	1905.	1906.	1907.
Repair of roadbed, ¹	\$0.105	\$0.098	\$0.100	\$0.104	\$0.107	\$0.102
Renewal of rails,	.005	.004	.007	.006	.013	.007
Repair of bridges,	.016	.016	.016	.022	.027	.020
Repair of locomotives,	.053	.049	.056	.070	.072	.070
Repair of passenger cars,	.041 ²	.070 ²	.059 ²	.065 ²	.072 ²	.075 ²
Repair of freight cars,	.166 ³	.096 ³	.116 ³	.116 ³	.122 ³	.151 ³
Wages,	.329	.343	.356	.369	.363	.387
Fuel,	.130	.174	.157	.156	.157	.170
Totals,	\$0.875	\$0.850	\$0.867	\$0.908	\$0.933	\$0.982

¹ Including renewal of ties.³ Per total freight train mile.² Per total passenger train mile.*Cost of Repairs, etc., per Total Train Mile (Three Roads) in 1907.*

REPAIRS, WAGES, ETC.	Boston & Albany.	Boston & Maine.	N. Y., N. H. & Hartford.
Repair of roadbed, ¹	\$0.102	\$0.106	\$0.099
Renewal of rails,	.010	.008	.006
Repair of bridges,	.008	.009	.035
Repair of locomotives,	.146	.052	.072
Repair of passenger cars, ²	.063	.088	.071
Repair of freight cars, ³	.309	.108	.154
Wages,	.373	.337	.449
Fuel,	.220	.161	.170
Totals,	\$1.231	\$0.869	\$1.056

¹ Including renewal of ties.³ Per total freight train mile.² Per total passenger train mile.

The next table gives the cost of repairs per locomotive and per car on each of the same three roads the last year:—

Cost of Repairs per Locomotive and per Car (Three Roads) in 1907.

RAILROAD COMPANIES.	Per Locomotive.	Per Passenger Car. ¹	Per Freight Car.
Boston & Albany, . . .	\$3,569 36	\$563 17	\$250 20
Boston & Maine, . . .	1,598 79	627 85	54 64
N. Y., N. H. & Hartford, . . .	1,925 30	517 71	62 88

¹ Including baggage, express and mail cars.

ROLLING STOCK.

The following table shows the amount of rolling stock (owned and leased) of all the companies, as returned at the end of each of the last seven years: —

Schedule of Rolling Stock, 1901–1907.

ROLLING STOCK.	1901.	1902.	1903.	1904.	1905.	1906.	1907.
Locomotives, .	2,169	2,202	2,277	2,390	2,528	2,509	2,604
Passenger cars, .	3,255	3,263	3,338	3,508	3,528	3,610	3,751
Baggage, express and mail cars, .	566	627	650	654	686	702	695
Freight cars, .	33,801	33,452	34,825	37,938	37,009	40,203	43,586
Gravel cars, etc., .	1,850	1,801	1,865	1,887	1,947	1,976	2,410

NUMBER OF EMPLOYEES.

The average number of persons employed during the last year by all the railroad companies making returns to the Board was 68,370 — an increase of 4,795 over the previous year. The following table gives the average number of employees for each of the last ten years: —

Average Number of Employees, 1898–1907.

YEARS.	Number of Employees.	YEARS.	Number of Employees.
1898,	51,602	1903,	58,888
1899,	51,881	1904,	60,156
1900,	53,045	1905,	61,564
1901,	53,564	1906,	63,575
1902,	56,388	1907,	68,370

GRADE CROSSINGS.

The number returned of grade crossings of highway and railroad in the state is 1,857, of which 1,101 are protected by gates or flagmen, or both, and 756 are unprotected.

Respectfully submitted,

FRED E. JONES,

Statistician.

SUMMARY OF RAILROAD ACCIDENTS.

The number of persons killed and injured on the railroads in Massachusetts during the year ending June 30, 1907, as reported by the several companies, together with the number reported in each of the preceding ten years, is shown by the following table : —

Number of Persons Killed and Injured on Railroads in Massachusetts, 1897-1907.

YEAR ENDING JUNE 30.		PASSENGERS.		EMPLOYEES.		TRAVELLERS ON HIGHWAY AT GRADE CROSSINGS. ¹		TRESPASSERS.		UNCLASSIFIED.		TOTAL.	
		Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1897, .	. . . . .	1	62	70	467	37	38	140	104	-	-	248	671
1898, .	. . . . .	6	142	49	535	28	55	145	117	-	-	228	849
1899, .	. . . . .	10	195	63	527	34	42	105	96	-	-	212	860
1900, .	. . . . .	4	89	51	479	30	49	136	89	-	-	221	706
1901, .	. . . . .	4	33	61	323	25	19	89	57	-	-	179	432
1902, .	. . . . .	11	104	71	486	29	19	124	62	-	-	235	671
1903, .	. . . . .	7	49	95	466	33	19	128	44	-	-	263	578
1904, .	. . . . .	4	70	87	417	31	29	139	75	3	7	264	598
1905, .	. . . . .	6	49	80	438	25	14	142	61	11	15	264	577
1906, .	. . . . .	22	126	64	437	28	32	126	77	11	8	251	680
Total, .	. . . . .	75	919	691	4,575	300	316	1,274	782	25	30	2,365	6,622
Average, .	. . . . .	8	92	69	458	30	32	127	78	-	-	237	662
1907, .	. . . . .	8	87	96	716	22	23	158	61	16	19	300	906

¹ Includes persons killed and injured while crossing tracks at stations in each of the years 1897-1903, inclusive.

In addition to the above, there were reported during the year 38 accidents which involved serious detention of passenger trains, but resulted in no personal injuries.

The total number of persons killed and injured during the year ending June 30, 1907, namely, 1,206, shows an increase of 275 over the number reported for the preceding fiscal year, and an increase of 307 over the average number reported annually for the preceding ten years. Of the total number of casualties, 300 were fatal, as against 251 reported for the year ending June 30, 1906, and as against 237, the average number of fatalities reported annually for the preceding ten years; while 906 were not fatal, as against 680 reported during the year ending June 30, 1906, and as against an average of 662 for the preceding ten year period.

Of the total number of persons injured, 43 were children, of whom 20 were fatally injured.

Thirty persons were killed and 83 persons were injured at stations during the year.

The percentage of passengers, employees, travellers on highway at grade crossings, and trespassers killed and injured during the year ending June 30, 1907, to the total number of casualties, is shown by the following table:—

	Killed.	Injured.	Total.
Passengers,	2.67	9.60	7.88
Employees,	32.00	79.03	67.33
Travellers on highway at grade crossings, .	7.33	2.54	3.73
Trespassers,	52.67	6.73	18.16
Unclassified,	5.33	2.10	2.90
Total,	100.00	100.00	100.00

Passengers.

Eight passengers were killed and 87 injured during the year. All the fatalities to passengers were reported to have occurred as the result of their own imprudence. Of the number injured, namely, 87, 64 were reported as injured from causes beyond their control, while 23 were reported as injured through their

own fault. The total number of passengers killed and injured during the preceding year was 22 and 126, respectively. The average number of passengers killed and injured annually during the ten years 1897-1906 was 8 and 92, respectively.

The character of accidents to passengers during the year ending June 30, 1907, is shown by the following:—

CHARACTER OF ACCIDENT.	Killed.	Injured.
Collision,	—	50
Derailment,	—	6
Falling,	3	11
Walking on or crossing track,	2	1
Getting on or off cars, trains,	2	10
Other,	1	9
Total,	8	87

The following table shows the ratio of passengers killed and injured to the total number of passengers carried and miles travelled by passengers on railroads in Massachusetts during the years ending June 30, 1906-1907:—

PASSENGERS CARRIED, ETC.	1906.	1907.
Total number of passengers carried in Massachusetts, ¹	107,667,857	114,602,141
Total miles travelled in Massachusetts, ¹	1,874,048,619	2,004,505,062
Passengers <i>killed</i> by causes beyond their control,	18	0
Ratio to total passengers carried,	1 to 5,981,548	—
Ratio to total miles travelled,	1 to 104,113,812	—
Passengers <i>injured</i> by causes beyond their control,	99	64
Ratio to total passengers carried,	1 to 1,087,554	1 to 1,790,658
Ratio to total miles travelled,	1 to 18,929,784	1 to 31,320,392
Passengers <i>killed</i> by their own fault or want of care,	4	8
Ratio to total passengers carried,	1 to 26,916,964	1 to 14,325,268
Ratio to total miles travelled,	1 to 468,512,155	1 to 250,563,133
Passengers <i>injured</i> by their own fault or want of care,	27	23
Ratio to total passengers carried,	1 to 3,987,698	1 to 4,982,702
Ratio to total miles travelled,	1 to 69,409,208	1 to 87,152,394

¹ The total number of passengers carried and the total miles travelled in Massachusetts are estimated to be about 80 per cent of the total number carried and travelled on the several roads, both in and out of the State.

Employees.

During the year 96 employees were killed and 716 were injured, as against 64 killed and 437 injured during the preceding twelve months. The average number of employees killed and injured annually during the preceding ten years was 69 and 458, respectively.

The following table shows the character of accidents to employees during the year ending June 30, 1907, as compared with the preceding fiscal year:—

CHARACTER OF ACCIDENT.	1906.		1907.	
	Killed.	Injured.	Killed.	Injured.
Collision,	6	30	8	72
Derailment,	—	13	1	19
Overhead and side obstruction,	3	34	5	64
Coupling and uncoupling,	4	27	8	67
Falling,	16	144	13	202
Engine accidents,	—	10	1	24
Walking on or crossing tracks,	25	23	32	39
Getting on or off cars, trains, etc.,	3	50	5	80
Working on track,	—	—	12	7
Other,	7	106	11	142
Total,	64	437	96	716

The number of employees killed and injured during the year ending June 30, 1907, classified by nature of employment, is shown by the following:—

NATURE OF EMPLOYMENT.	Killed.	Injured.
Trainmen,	49	594
Trackmen,	23	67
Shopmen,	4	10
Stationmen,	3	1
Crossingmen,	6	2
Inspectors,	2	10
Freight handlers,	1	6
Watchmen,	1	—
Car cleaners,	—	7
Other,	7	19
Total,	96	716

Grade Crossings.

The number of travellers on highway killed at grade crossings during the year was 22, and the number injured 23, as against 28 killed and 32 injured during the preceding year.

Of the total number killed, 9 were killed at grade crossings protected by gates, flagmen or otherwise; 8 at unprotected crossings (including 1 person killed at grade crossing protected a part of the time, but unprotected at the time of the accident), and 5 at private crossings. Of the total number injured, namely, 23, 10 were injured at protected crossings, 10 at unprotected crossings, and 3 at private crossings.

The following table shows, for the year ending June 30, 1907, the number and character of accidents at grade crossings on the different railroads: —

Accidents at Grade Crossings during the Year ending June 30, 1907.

RAILROADS.	PROTECTED CROSSINGS.				UNPROTECTED CROSSINGS.				TOTAL.				AT PRIVATE CROSSINGS.	
	Number.	Killed.	Injured.	Ratio of Accidents to Crossings.	Number.	Killed.	Injured.	Ratio of Accidents to Crossings.	Number.	Killed.	Injured.	Ratio of Accidents to Crossings.	Killed.	Injured.
Attleborough Branch,	-	-	-	-	18	-	-	-	18	-	-	-	-	-
Boston & Albany,	57	1	2	1 to 19	136	2	5	1 to 19	193	3	7	1 to 19	2	-
Boston & Maine,	511	6	2	1 to 64	233	2	-	1 to 117	744	8	2	1 to 74	1	2
Boston, Revere Beach & Lynn,	10	-	-	-	-	-	-	-	10	-	-	-	-	-
Cape Ann Granite, ¹	- ¹	-	-	-	- ¹	-	-	-	- ¹	-	-	-	-	-
Grafton & Upton,	-	-	-	-	29	-	-	-	29	-	-	-	-	-
Nantucket Central, ¹	- ¹	-	-	-	- ¹	-	-	-	- ¹	-	-	-	-	-
New London Northern,	4	-	-	-	41	-	-	-	45	-	-	-	-	-
New York, New Haven & Hartford,	512	2	6	1 to 64	299	4 ²	5	1 to 33	811	6	11	1 to 48	2	1
Totals for the year,	1,094	9	10	1 to 58	756	8	10	1 to 42	1,850	17	20	1 to 50	5	3
Totals for the year ending June 30, 1906,	1,100	17	19	1 to 31	768	6	10	1 to 48	1,868	23	29	1 to 36	5 ²	3 ²

¹ Not in operation during fiscal year, and number of grade crossings not included in table.

² Includes 1 person killed at crossing protected a part of the time, but unprotected at time of accident.

³ Two were at protected crossings.

Trespassers.

The total number of trespassers killed during the year ending June 30, 1907, was 158. The number of trespassers injured was 61. During the preceding year 126 trespassers were killed and 77 injured, while the average number killed and injured annually for the preceding ten years was 127 and 78 respectively.

The character of accidents to trespassers during the year ending June 30, 1907, is shown by the following:—

CHARACTER OF ACCIDENT.	Killed.	Injured.
Collision,	1	—
Overhead or side obstruction,	4	1
Falling,	6	14
Walking on or crossing track,	121	31
Getting on or off cars, trains,	2	10
Other,	24	5
Total,	158	61

There were 16 persons killed and 19 injured whose proper classification in the reports of accidents was indeterminable.

RAILROAD BRIDGES.

To the Massachusetts Board of Railroad Commissioners.

GENTLEMEN:—I beg leave to present the following statement regarding the bridges on the steam railroads of the Commonwealth. The following tables, which are similar to those published in previous reports, give statistics regarding the number and kind of bridges.

Table I. gives total number of bridges of each type.

Table II. gives the total length of bridges of stone, wood and metal.

Table III. gives a summary of the bridge work done during the year ending June 30, 1907.

TABLE I. — *Number and Description of Railroad Bridges in Massachusetts, June 30, 1907.*

RAILROADS.	Pile Bridges.													Total Length of Pile and Trestle Bridg- ing (Approximate).								
	Steel and Wooden Trestles.	Wooden Stringers.	Braced or Trussed Stringers.	Wooden or Combina- tion Trusses.	Stone, Concrete, or Brick Arches.	I-Beams.	Plate Girders.	Metal Riveted Trusses.	Metal Pin-connected Trusses.	Rails.	Pin-connected Metal Swing Bridges.	Metal Folding, Roll- ing Lift or Jack- knife Draw.	Pratt, Howe or other Wooden Jack-knife Draws.	Plate Girder Swing Bridges.	Trussed Beam Swing Draws.	Total Spans Stone Bridges.	Total Wooden and Combination Bridges (Fixed Spans).	Total Metal Bridges (Fixed Spans).	Total Movable Bridges.	Grand Totals.	Total Length of Pile and Trestle Bridg- ing (Approximate).	
Boston & Albany,	7	4	-	-	50	54	101	64	-	-	-	2	2	-	-	-	50	11	219	4	284	3,332
Boston & Maine,	61	17 ¹	67	18	92	79	297	65	48	-	1	1	10	2	2	1	92	166	491	15	764	23,352
Boston, Revere Beach & Lynn,	5	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	5	-	2	7	5,055
New London Northern,	5	2	8	1	1	2	21	11	4	-	-	-	-	-	-	-	1	17	38	-	56	508
New York, New Haven & Hartford,	80	9	80	11	136	54	441	14	27	11	2	2	2	1	-	-	136	183	547	7	873	14,877
Totals,	158	32 ¹	155	30	279	189	860	154	79	11	3	6	14	4	1	1	279	382	1,295	28	1,984	47,124
Deduct as counted twice,	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	4	-	4	-
Net totals,	158	32 ¹	155	30	279	189	856	154	79	11	3	6	14	4	1	1	279	382	1,291	28	1,980	47,124

¹ Including one steel trestle.² Including one steel stringer.

TABLE II. — *Length of Bridging of Wood, Stone, and Metal, June 30, 1907.*

RAILROADS.	WOODEN BRIDGES		STONE BRIDGES.		METAL BRIDGES.	
	Number.	Total Length (Feet).	Number.	Total Length (Feet).	Number.	Total Length (Feet).
Boston & Albany,	12	3,372	50	1,260	222	11,819
Boston & Maine,	177	25,772	92	1,871	495	26,743
Boston, Revere B. & Lynn, .	5	5,055	—	—	2	130
New London Northern, . .	17	707	1	19	38	2,769
N. Y., N. H. & Hartford, .	185	17,129	136	3,582	552	23,743
Totals,	396	52,035	279	6,732	1,309	65,204

TABLE III. — *Bridge Work Done in the Year ending June 30, 1907.*

RAILROADS.	NEW BRIDGES BUILT.			BRIDGES REBUILT OR REPLACED.			BRIDGES STRENGTHENED OR EXTENSIVELY REPAIRED.		
	Wood.	Stone.	Metal.	Wood.	Stone.	Metal.	Wood.	Stone.	Metal.
Boston & Albany,	—	—	1	2 ¹	—	1	—	—	—
Boston & Maine,	—	—	3	7 ²	—	1	—	—	—
Boston, Revere Beach & Lynn,	—	—	—	—	—	—	—	—	—
New London Northern, . .	—	—	—	3 ³	—	1	—	—	—
N. Y., N. H. & Hartford, .	2	7	25	6 ⁴	1	10	—	—	—
Totals,	2	7	29	18	1	13	—	—	—

¹ As metal.³ Two as wood, one as metal.² Six as wood, one as metal.⁴ Five as metal.

Explaining Table III. more in detail, the work that has been done by the different companies during the year is as follows:—

On the Boston and Albany railroad one new plate girder span has been built in abolishing a grade crossing; one wooden truss span has been rebuilt with plate girders; one wooden jackknife draw span has been rebuilt as a riveted truss jackknife draw span, and one I-beam span has been rebuilt with plate girders.

On the Boston, Revere Beach and Lynn railroad the pile bridge at Saugus has had new stringers and ties.

On the New London Northern railroad two wooden stringer spans have been rebuilt; one wooden trestle has been rebuilt with plate girders, and one riveted lattice truss span has been rebuilt with plate girders.

On the Boston and Maine railroad the following work has been done on the different divisions: On the Eastern division one short I-beam span has been filled. On the Western division two wooden stringers have been rebuilt; one I-beam span has been rebuilt with plate girders and two new plate girder spans have been built, one in the elimination of a grade crossing. On the Southern division one wooden stringer and one pile bridge have been rebuilt. On the Central Massachusetts line one trussed wooden stringer span which was burned has been replaced by keyed wooden stringers. On the Nashua, Acton and Boston line one new I-beam span has been built. On the Fitchburg division one pile bridge has been rebuilt, and one framed wooden trestle replaced by plate girders.

On the New York, New Haven and Hartford railroad the following work has been done on the different divisions: On the Boston and Providence line two plate girder spans have been rebuilt. On the remainder of the Old Colony system part of the long pile bridge, and the wooden jackknife draw at Neponset have been replaced by a rolling lift bridge and five plate girder spans; four wooden stringer spans have been rebuilt with I-beams; two plate girder spans have been rebuilt; one wooden stringer span has been filled; one pile bridge has been rebuilt and two repaired; two new pile bridges have been built on a spur track, and three new plate girder spans on a siding at Milton; one new plate girder span has been built; besides which various repairs have been made on other structures.

On the Housatonic division one I-beam span has been rebuilt with plate girders and another filled, while a second track has been added to a third.

On the Midland division five plate girder spans have been rebuilt and one brick arch replaced with concrete in the abolition of the Dudley street grade crossing, and four new plate girder spans built in abolishing a second; two spans of reinforced concrete arches have been built near the shops at Readville, while on the West Roxbury and Needham extension seventeen new spans have been built, of which five are reinforced concrete arches and twelve are plate girders.

The biennial reports of inspection of bridges are regularly received from the various railroad companies and are carefully examined and such further examinations made as seem requisite. It may be interesting, however, to note the methods of various railroads in inspecting their bridges.

On the Boston and Albany railroad the line is divided into three divisions and each division is assigned to an inspector who carefully inspects each bridge once a month, the inspection of the structures upon each division requiring about this length of time. After completing the inspection he makes a report to the division road master and starts again for another month's trip. From the road master the report goes to the bridge engineer. The inspector is expected to examine every accessible part of each bridge, and his report is submitted on a prescribed blank form in which the condition of each part of each structure is to be stated, together with the number of loose rivets found and any other facts which are disclosed.

In case the monthly inspection discloses any fact which seems to the inspector to require immediate attention, or which seems to him doubtful, the bridge engineer is notified immediately, visits the structure, decides what, if anything, should be done, and arranges to have it done. The biennial report to this Board is made by the bridge engineer on the basis of his close knowledge of the actual condition of each structure.

On the New York, New Haven and Hartford railroad the bridges are inspected by the "division bridge supervisors," or their assistants, who report to the division engineer. There is no uniformity in respect to the frequency of inspection. Old structures are usually inspected once a month, while if there are any details in a structure which give any indication of deterioration or progressive changes these are watched at even more frequent intervals. New structures are supposed to be completely inspected once in three months. Each inspection is required to be thorough, every accessible part being examined. Blank forms are not employed, but any facts which are discovered are noted and reported to the division engineer. In case the bridge supervisor is doubtful about a structure he notifies the bridge engineer or his assistant, who makes a careful examination. When the biennial reports are to be made all the bridges are personally examined either by the division engineer or the engineer of bridges.

On the Central Vermont railroad inspecting is done by the general foreman, who reports to the superintendent of structures. There is no set time for inspection, but the general foreman goes over the bridges during the spring and makes his report thereafter. The inspection is complete and is made for the purpose of providing for the work to be done during the following season. In addition to the yearly inspection by the general foreman, the bridge foreman on each division makes frequent inspections of the bridges on his division and

calls any important matter immediately to the attention of the superintendent of structures.

These notes will indicate the general system pursued by the different roads and it is apparent that they are all similar in character, although subject to more formality on some roads than upon others.

It is apparent that with careful inspectors and competent bridge engineers the structures upon our roads should be always safe, and that any defect should be promptly discovered.

When it is stated that at the time the law providing for the inspection of bridges was passed most of the railroads in the state had no bridge engineer and many of them had no plans of their bridges, the great increase in efficiency in this department of maintenance will be evident.

In previous reports I have called attention from time to time to the increase in weight of rolling stock on the roads of this Commonwealth. As ten years have elapsed since I last specifically referred to this matter, it may be interesting to show what further changes have occurred.

The following table shows the weights of the heaviest locomotive and tender in use on the four principal railroads at present operating independently in the State, from which the remarkable growth in this respect is strikingly illustrated.

	1873.		1887.		1897.		1907.	
	Locomotive.	Tender.	Locomotive.	Tender.	Locomotive.	Tender.	Locomotive.	Tender.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Boston & Albany,	30	20	60	33	66	42	111	71
Boston & Maine,	35	25	60	43	69	44	87.5	58
N. Y., N. H. & H.,	35	20	55	34	73	40	114.75	67
New Lon. Nor.,	33	24	44	27	51	35	101	-

On the Boston and Albany railroad the weight of the heaviest locomotive has increased from thirty tons in 1873 to sixty in 1887, sixty-six in 1897 and one hundred and eleven in 1907.

On the Boston and Maine railroad the increase has been less rapid, namely, from thirty-five tons in 1873 to 87.5 tons in 1907.

On the New York, New Haven and Hartford railroad the increase has been still more pronounced, the heaviest engine now running in the State being upon that line and weighing 114.75 tons, which compares with thirty-five tons in 1873, fifty-five tons in 1887, and seventy-three tons in 1897.

On the New London Northern railroad (Central Vermont) the increase has been from thirty-three tons in 1873 to fifty-one tons in 1897 and one hundred and one tons in 1907.

In this table the figures for the years 1873, 1887 and 1897 have been taken from my report of January, 1898.

These figures illustrate the striking fact that while there was a remarkable increase in the weight of locomotives between 1873 and 1887, there was but little change between 1887 and 1897, and it seemed at that time that the maximum had nearly been reached. Since that time, however, our railroads have experienced a renewed growth in this respect, consequent upon the effort to increase train loads and operating economy, so that within the last ten years the weight of the heaviest locomotives has in some cases nearly doubled.

The weight of tenders has increased in about the same proportion. In 1873 the heaviest tender weighed about twenty-five tons, while at present they weigh over seventy tons, with a corresponding increase in tank and coal capacity. The heaviest tender is reported by the Boston and Albany railroad, and weighs 141,600 pounds.

The strength of some parts of bridges is largely dependent, not upon total weight of an engine, but upon the greatest load which comes upon one wheel, for a large weight distributed over sufficient distance may be less severe in its effect than a heavier weight concentrated within a shorter distance. The maximum weight carried by one axle has experienced but little increase in the past ten years. In 1887 thirty-five thousand pounds was a heavy load for one axle, and was rarely exceeded. In 1897 fifty thousand pounds was not uncommon, while forty thousand to forty-five thousand pounds was not unusual in heavy engines. The heaviest axle load reported at the present time is 53,800 pounds. It is interesting to observe that while the total weight of locomotives has increased rapidly since 1897, the limitations of track and bridges have not rendered possible or desirable a corresponding increase of the weight on one axle, which has remained about the same as it was ten years ago. On the heavy engines now in use the increase in tractive power has been gained by increasing the number of driving wheels and only to a slight extent the weight on each.

In this connection it is interesting to refer to the articulated compound engine recently placed in service on the Erie railroad, which is said to be the heaviest locomotive in the world. This machine has sixteen driving wheels, four pairs for each of two sets of cylinders. The total weight on the drivers is 409,000 pounds, each wheel carrying 25,562.5 pounds. The weight of the tender is 163,000 pounds, or

81.5 tons, each wheel carrying 20,375 pounds. The total weight of the engine and tender is 572,000 pounds or 286 tons, covering a wheel base of a little over seventy feet.

The growth of our railroads can be illustrated in no better way than by comparing these huge locomotives now running, with the “Old Ironsides”, running in 1832, which weighed something over five tons.

The weight of cars has also increased. In 1870 the heaviest box freight cars loaded weighed about 1,350 pounds per running foot of track; long coal cars weighed about 1,800 pounds per foot of track, and short coal cars about 1,460 pounds per foot of track. In 1887 these weights had increased to such an extent that hopper coal cars were in use weighing over 3,600 pounds per foot of track, while box freight cars weighed not less than 2,400 pounds per foot of track. In 1907, box freight cars weigh as high as 5,500 pounds per foot, allowing for an overload of about ten per cent., hopper coal cars weigh about the same, while some ore cars weigh over 6,000 pounds per foot when fully loaded with iron ore.

Respectfully submitted,

GEORGE F. SWAIN,

Bridge Engineer.

ISSUES OF STOCK AND BONDS.

Issues of Capital Stock.

RAILROAD COMPANIES.	Date when Authorized.	Amount Authorized.
	1907.	
Boston & Lowell Railroad Corporation, .	July 1,	\$250,000
Old Colony,	October 21,	7,600

Issues of Bonds.

RAILROAD COMPANIES.	Date when Authorized.	Amount Authorized.
	1907.	
Boston & Lowell Railroad Corporation, .	April 12,	\$325,000
Chatham (Note),	October 7,	9,000
Nantucket Central,	June 19,	17,000

RAILWAYS.

Annual returns for the year ending September 30, 1907, have been received from eighty-five street railway companies.

A return of the operations of the Worcester and Dudley and the Worcester and Webster (the Consolidated, of Connecticut, lessee) to April 1, 1907 (when the lease was transferred to the Worcester and Southbridge), was also received. A return was also received from the receiver of the South Middlesex for the period during which this railway was operated by the receiver.

COMPANIES ADDED TO THE LIST.

During the year one company was organized under the general law and added to the list, being the purchaser of a railway sold at receiver's sale; the Middlesex and Boston, purchaser of the South Middlesex.

COMPANIES DROPPED FROM THE LIST.

During the year six companies have been dropped from the list, as follows: The Georgetown, Rowley and Ipswich; the Hoosac Valley; the Lowell and Woburn; the Taunton and Buzzards Bay; these companies having been consolidated with others; the South Middlesex, its property having been sold at receiver's sale to a new corporation formed as before stated.

The Woonsocket, a Rhode Island corporation, has also been dropped from our list, its property and franchise having been sold to and the property merged in the Rhode Island Company, a Rhode Island corporation, so that any figures in relation to its financial statement would be misleading as to Massachusetts.

CONSOLIDATION OF COMPANIES.

During the year the Amherst and Sunderland (July 31, 1907), was consolidated with the Holyoke; the Hampshire (June 30, 1907) with the Holyoke; the Woronoco (April 30, 1907) with the Western Massachusetts. All these companies have made returns to these several dates.

LEASES.

The leases of the Webster and Dudley and the Worcester and Webster have been transferred from the Consolidated of Connecticut to the Worcester and Southbridge, which is also operating the Hartford and Worcester under a contract terminating September 30, 1908.

OPERATION OF COMPANIES.

By reasons of consolidations there were at the end of the year eighty-two existing companies. Of this number sixty-two operated their railways, seventeen were operated under lease or contract by other companies, and three had organized and paid in a portion of their capital stock but had not commenced the construction of their railways.

RAILWAY MILEAGE.

New Mileage.

There have been added during the last year to the mileage of the Massachusetts companies 25.062 miles of street railway line and 7.500 miles of second track, making 32.562 miles of additional main track. There have also been added 4.515 miles of side track, making a total addition of 37.077 miles of track reckoned as single track.

Mileage Owned.

The Massachusetts companies now own 2,233.121 miles of street railway line, 427.624 miles of second main track and 157.130 miles of side track, making a total length of track reckoned as single track owned, 2,817.875 miles.

For reasons before stated this does not include the Woonsocket, which was in last year's return, which has 21.961 miles of main line, of which 3.195 miles is in Massachusetts and .863 of a mile of side track, of which .103 of a mile is in Massachusetts.

All of the track owned is surface street railway track with the exception of 8.660 miles of elevated line and 8.484 miles of elevated second track. Of the sidings all are surface track with the exception of 3.592 miles of elevated track. All the elevated track is located in Boston.

The Old Colony leases and operates the Newport and Fall River, having a mileage of main and second track of 19.294 miles, located in Rhode Island; and the Boston and Northern leases and operates the Nashua, having a mileage of main and second track of 14.899 miles located in New Hampshire. Accordingly 34.193 miles of main and second track are operated outside of the state.

Mileage Operated.

The total miles of main track (including trackage rights) operated, is 2,745.266, — an increase of 31.175 miles over the previous year.

STATISTICS.

BOSTON, January 1, 1908.

Board of Railroad Commissioners.

GENTLEMEN:—I submit the following compilations of statistics from the returns of the several street railway companies to the Board for the year ending September 30, 1907.

The Woonsocket, a Rhode Island corporation with a small part of its mileage in this state, formerly made returns to the Board which were included in the statistics from year to year. This property having been sold and merged with the Rhode Island (a Rhode Island corporation) no return has been received from the company this year; and in order to secure in the following statistics a true comparison between the years 1906 and 1907, the return of the Woonsocket company for 1906 has been omitted.

The following table gives the length of railway line and track, and total reckoned as single track returned by the companies for the year ending September 30, 1907, as compared with the previous year:—

Street Railway Mileage Owned, 1906 and 1907.

MILEAGE OWNED.	1906.	1907.	Increase.
	Miles.	Miles.	Miles.
Length of railway line, . . .	2,208.059	2,233.121	25.062
Length of second track, . . .	420.124	427.624	7.500
Total length of main track, .	2,628.183	2,660.745	32.562
Length of side track, . . .	152.615	157.130	4.515
Total, reckoned as single track,	2,780.798 ¹	2,817.875 ¹	37.077

¹ Not including 3.195 miles main line and .103 of a mile of side track located in this state, formerly owned by the Woonsocket, now by the Rhode Island of Rhode Island.

Mileage Operated.

The total miles of main track operated (including trackage rights) September 30, 1907, is 2,745.266, — an increase of 31.175 miles over the previous year. All of the track operated is in this state except 34.193 miles located in Rhode Island and New Hampshire, and operated by the Old Colony or the Boston and Northern.

ASSETS AND LIABILITIES.

The gross assets of the companies September 30, 1907, were \$161,297,913.49. The several classes of assets, and the increase in each class as compared with the same companies in 1906, are shown in detail in the following table: —

Gross Assets, September 30, 1906 and 1907.

ASSETS.	1906.	1907.	Increase.
Construction,	\$76,376,521	\$79,993,550	\$3,617,029
Equipment,	26,930,391	28,738,946	1,808,555
Land and buildings, . . .	34,347,591	36,941,286	2,593,695
Other permanent property, .	1,721,789	1,808,000	86,211
Cash and current assets, . .	10,441,634	5,855,412	4,586,222*
Miscellaneous assets, . . .	6,096,828	7,960,720	1,863,892
Gross assets,	\$155,914,754	\$161,297,914	\$5,383,160

* Decrease.

The gross liabilities at the same date, including capital stock (but not including sinking and other funds), were \$153,847,903.47. The several kinds of liabilities, and the amount of each as compared with the same companies in 1906, were as follows: —

Gross Liabilities, September 30, 1906 and 1907.

LIABILITIES.	1906.	1907.	Increase.
Capital stock,	\$70,916,925	\$73,280,155	\$2,363,230
Funded debt,	58,016,000	59,339,500	1,323,500
Real estate mortgages,	74,400	84,800	10,400
Current liabilities,	15,977,380	17,166,056	1,188,676
Accrued liabilities,	4,073,990	3,977,393	96,597*
Gross liabilities, ¹	\$149,058,695	\$153,847,904	\$4,789,209
Sinking and other special funds,	2,204,503	2,413,354	208,851
Surplus, ²	4,651,556	5,036,656	385,100
Totals,	\$155,914,754	\$161,297,914	\$5,383,160

¹ Exclusive of sinking and other special funds.² Includes premium on sales of stock and bonds.

* Decrease.

It will be seen by comparing the last two tables that there was an increase in gross assets of \$5,383,160, and there was an increase in gross liabilities of \$4,789,209, thus increasing the aggregate surplus and sinking and other special funds of the companies by the amount of \$593,951.

The gross assets, the gross liabilities, including capital stock, and the surplus of the companies, with the percentage of surplus to capital stock, at the end of each of the last ten years, are shown in the following table:—

Gross Assets, Liabilities and Surplus for Ten Years, 1898-1907.

YEARS.	Gross Assets.	Gross Liabilities.	Surplus *	Percentage of Surplus to Capital.
1898,	\$77,607,326	\$75,889,625	\$1,717,701	4.41
1899,	85,764,845	83,279,891	2,484,954	6.01
1900,	98,700,075	95,062,946	3,637,129	7.43
1901,	107,250,656	103,598,042	3,652,614	6.76
1902,	123,200,558	119,441,792	3,758,766	6.26
1903,	138,864,215	133,121,411	5,742,804	8.40
1904,	140,843,740	136,049,486	4,794,254	6.99
1905,	151,742,233	145,603,242	6,138,991	8.73
1906,	156,478,141	149,672,263	6,805,878	9.56
1907,	161,297,914	153,847,904	7,450,010	10.17

* Includes "premium on sales of stock and bonds" and "sinking and other special funds."

CAPITAL STOCK AND DIVIDENDS.

The aggregate capital stock of the eighty-two companies, September 30, 1907, was \$73,280,155.00, — a net increase of the same companies of \$2,363,230.00 over the preceding year.

Dividends.

The total amount of dividends declared the last year was \$3,721,-388.24, — an increase of \$167,315.00 over the preceding year. Thirty-six out of the eighty-five companies paid dividends ranging from 1 to 10 per cent, and forty-nine companies declared or paid no dividends.

One company paid 10 per cent; six companies paid 8 per cent; one paid 8 per cent on preferred and 7 per cent on common; one paid 7.22 per cent; one paid 7.20 per cent; one paid 7 per cent; eight paid 6 per cent; one paid 5.5 per cent; seven paid 5 per cent; two paid 4 per cent; one paid 3.75 per cent; one paid 3 per cent; one paid 2.5 per cent; three paid 2 per cent; and one paid 1 per cent.

Capital Stock, Net Income and Dividends, 1898-1907.

YEARS.	Capital Stock.	Net Divisible Income.	Dividends Declared.	Percentage on Total Capital Stock.
1898,	\$38,933,917	\$2,534,002	\$2,076,233	5.33
1899,	41,380,143	2,502,942	2,318,398	5.60
1900,	48,971,168	3,037,502	2,409,874	4.92
1901,	54,069,933	3,398,183	3,417,117	6.32
1902,	60,036,328	3,388,851	3,138,711	5.23
1903,	68,404,480	3,602,917	3,586,248	5.24
1904,	68,542,038	2,998,114	3,214,496	4.69
1905,	70,326,985	3,556,690	3,174,505	4.51
1906,	71,216,925	4,160,073	3,554,073	4.99
1907,	73,280,155	4,125,185	3,721,388	5.08

FUNDED AND FLOATING DEBT.

The aggregate funded debt of the companies, September 30, 1907, was \$59,339,500, — an increase of \$1,323,500 over the preceding year.

Floating Debt.

The amount of real estate mortgages outstanding September 30, 1907, was \$84,800, — an increase of \$10,400 over the preceding year.

The total unfunded debt, including the above mortgages, was \$21,228,249, — an increase of \$1,102,479.

The gross debt, funded and unfunded, was \$80,567,749, — an increase of \$2,425,979.

The net debt (the gross debt less \$5,855,412 of cash and current assets) was \$74,712,337, — an increase of \$7,012,201. In computing the net debt the sum of \$7,960,720 returned as “miscellaneous assets,” covering materials and supplies on hand, etc., is not included with cash and current assets in the deduction from gross debt.

The funded debt, unfunded debt, gross debt, cash and current assets, and net debt, for each of the last ten years, are shown in the following table: —

Funded, Unfunded, Gross and Net Debt, 1898-1907.

YEARS.	Funded Debt.	Unfunded Debt. ¹	Gross Debt.	Cash and Current Assets.	Net Debt. ²
1898, . . .	\$29,132,700	\$7,823,008	\$36,955,708	\$7,130,861	\$29,824,847
1899, . . .	29,928,500	11,971,248	41,899,748	6,053,677	35,846,071
1900, . . .	34,373,000	11,718,778	46,091,778	10,347,849	35,743,929
1901, . . .	34,312,500	15,215,609	49,528,109	3,986,857	45,541,252
1902, . . .	37,751,000	21,654,464	59,405,464	6,370,679	53,034,785
1903, . . .	41,411,500	23,305,431	64,716,931	10,455,046	54,261,885
1904, . . .	46,674,884	20,832,564	67,507,448	6,554,738	60,952,710
1905, . . .	55,780,500	19,495,758	75,276,258	12,315,705	62,960,553
1906, . . .	58,176,000	20,279,338	78,455,338	10,447,216	68,008,122
1907, . . .	59,339,500	21,228,249	80,567,749	5,855,412	74,712,337

¹ Including real estate mortgages.

² Gross debt less cash and current assets.

Capital Investment.

The total capital investment (capital stock and net debt) of the street railway companies of the state on September 30, 1907, was \$147,992,492, — an increase of \$9,375,431 over the previous year.

COST AND CAPITAL INVESTMENT PER MILE.

The average cost of the street railways of the state, per mile of main track (including the cost but not the length of side track), as returned by the companies September 30, 1907, was \$30,064.34 for construction; \$10,801.09 for equipment; and \$14,563.32 for lands, buildings (including power plants) and other permanent property, — making a total average cost of \$55,428.75 per mile of main track.

The following table gives the average cost, classified as above, and also the average capital investment (amount of outstanding capital

stock and net debt), per mile of main track, as returned by all of the companies at the end of each of the last ten years: —

Cost and Capital Investment per Mile of Main Track, 1898–1907.

YEARS.	Construction.	Equipment.	Other Permanent Property. ¹	Total Cost per Mile.	Capital Investment per Mile. ²
1898, . . .	\$22,537	\$8,957	\$11,735	\$43,229	\$44,958
1899, . . .	22,863	8,518	11,598	42,979	45,040
1900, . . .	23,443	8,510	11,684	43,637	44,273
1901, . . .	23,953	8,678	11,666	44,297	45,757
1902, . . .	24,495	9,026	11,889	45,410	46,261
1903, . . .	26,015	9,994	12,546	48,555	48,621
1904, . . .	27,025	10,177	13,106	50,308	50,295
1905, . . .	27,876	10,112	13,321	51,309	50,772
1906, . . .	28,974	10,212	13,616	52,802	52,535
1907, . . .	30,064	10,801	14,563	55,428	55,624

¹ Chiefly lands, buildings and power plants. ² Outstanding capital stock and net debt.

INCOME AND EXPENDITURES.

The total income of the companies from all sources, for the year ending September 30, 1907, was \$32,203,111.37, and the total expenditures (including dividends declared) were \$31,799,314.56, — making a net surplus of \$403,796.81 to be added to the surplus of previous years.

The sources of total income, and the amount derived from each source as compared with 1906, were as follows: —

Total Income, 1906 and 1907.

INCOME.	1906.	1907.	Increase.
Gross earnings from operation, .	\$29,410,280	\$30,557,862	\$1,147,582
Rentals from lease of railway, .	1,337,751	1,351,777	14,026
Income from other sources, .	335,804	293,472	42,332*
Total income, . . .	\$31,083,835	\$32,203,111	\$1,119,276

* Decrease.

The items of total expenditure, with the increase and decrease in each item over the previous year, are shown in the following table: —

Total Expenditures, 1906 and 1907.

EXPENDITURES.	1906.	1907.	Increase.
Expense of operation, . . .	\$19,825,841	\$20,689,668	\$863,827
Interest on debt and loans, . .	3,150,145	3,297,815	147,670
Taxes,	1,916,979	1,915,447	1,532*
Rentals of leased railways, . .	1,518,262	1,538,305	20,043
Other charges on income, . .	516,580	636,691	120,111
Dividends paid,	3,554,073	3,721,388	167,315
Total expenditures, . . .	\$30,481,880	\$31,799,314	\$1,317,434
Surplus for the year, . . .	601,955	403,797	198,158*

* Decrease.

EARNINGS AND EXPENSES OF OPERATION.

The gross earnings and expenses of operation the last year are classified and compared with those of the previous year, in the following table: —

Gross Earnings and Expenses of Operation, 1906 and 1907.

EARNINGS AND EXPENSES.	1906.	1907.	Increase.
Revenue from passengers, . .	\$28,640,699	\$29,714,698	\$1,073,999
from mails and merchandise,	134,182	195,593	61,411
from tolls and advertising, etc., . . .	635,399	647,571	12,172
Gross earnings from operation,	\$29,410,280	\$30,557,862	\$1,147,582
Operating expenses,	19,825,841	20,689,668	863,827
Net earnings from operation,	\$9,584,439	\$9,868,194	\$283,755

VOLUME OF TRAFFIC.

The total number of passengers¹ carried during the last year on the railways in operation of the eighty-five companies making returns to the Board was 600,695,816, — an increase of 22,307,041 passengers¹ over the previous year.

¹ Computed on the basis of five-cent fares collected.

The total number of miles run by street cars was 117,719,203, — an increase of 4,123,981 miles over the previous year.

The following table gives the total volume of traffic, itemized as above, for each of the last ten years: —

Volume of Traffic for Ten Years, 1898–1907.

YEARS.	Total Passengers Carried.*	Average Number per Mile of Main Track Operated.	Total Car Miles Run.
1898,	330,889,629	207,982	68,206,418
1899,	356,724,213	205,098	73,367,235
1900,	395,027,198	200,262	81,750,768
1901,	433,526,935	195,683	93,005,225
1902,	465,474,382	188,787	100,280,687
1903,	504,662,243	192,548	107,506,812
1904,	520,056,511	195,917	107,897,456
1905,	532,731,017	199,637	109,258,739
1906,	581,450,906	212,514	114,312,626
1907,	600,695,816	217,042	117,719,203

* Computed on the basis of five cent fares collected.

EARNINGS AND EXPENSES OF OPERATION.

The following table gives the gross earnings from operation, the operating expenses, the ratio of operating expenses to gross earnings, and the net earnings for each of the last ten years: —

Percentage of Operating Expenses to Gross Earnings, 1898–1907.

YEARS.	Gross Earnings from Operation.	Operating Expenses.	Percentage of Expenses to Earnings.	Net Earnings.
1898,	\$16,915,405	\$11,672,731	69.01	\$5,242,674
1899,	18,151,550	12,378,488	68.20	5,773,062
1900,	19,999,640	13,159,947	65.80	6,839,693
1901,	21,766,340	14,565,141	66.92	7,201,199
1902,	23,486,474	15,912,852	67.75	7,573,622
1903,	25,540,811	17,519,367	68.59	8,021,444
1904,	26,207,247	18,397,291	70.20	7,809,956
1905,	27,041,291	18,269,259	67.56	8,772,032
1906,	29,563,892	19,954,000	67.49	9,609,892
1907,	30,557,862	20,689,668	67.71	9,868,194

The following tables give for each of the last ten years the average gross earnings, operating expenses, and net earnings from operation, (1) per total mile of main track owned, (2) per car mile run and per passenger carried,—thus showing more in detail the changes from year to year in the earnings, cost, and net results of operation.

Gross and Net Earnings from Operation per Mile of Main Track Owned, 1898-1907.

YEARS.	AVERAGE PER MILE OF TRACK OWNED.		
	Gross Earnings.	Expenses of Operation.	Net Earnings.
1898,	\$10,998	\$7,589	\$3,409
1899,	10,459	7,132	3,327
1900,	10,452	6,878	3,574
1901,	9,998	6,690	3,308
1902,	9,609	6,510	3,099
1903,	10,124	6,944	3,180
1904,	10,178	7,145	3,033
1905,	10,300	6,959	3,341
1906,	11,156	7,529	3,627
1907,	11,485	7,776	3,709

Gross and Net Earnings from Operation per Car Mile Run and per Passenger Carried, 1898-1907.

YEARS.	AVERAGE PER CAR MILE.			AVERAGE PER PASSENGER.		
	Gross Earnings.	Expenses of Operation.	Net Earnings.	Gross Earnings.	Expenses of Operation.	Net Earnings.
1898,	24.80	17.11	7.69	5.11	3.52	1.59
1899,	24.74	16.87	7.87	5.09	3.47	1.62
1900,	24.46	16.10	8.36	5.06	3.33	1.73
1901,	23.40	15.66	7.74	5.02	3.36	1.66
1902,	23.42	15.87	7.55	5.05	3.42	1.63
1903,	23.76	16.30	7.46	5.06	3.47	1.59
1904,	24.29	17.05	7.24	5.04	3.54	1.50
1905,	24.75	16.72	8.03	5.08	3.43	1.65
1906,	25.86	17.46	8.40	5.08	3.43	1.65
1907,	25.96	17.58	8.38	5.08	3.44	1.64

EMPLOYEES AND EQUIPMENT.

The number of persons employed by the street railway companies, and also the number of cars, vehicles and electric motors owned, are given in the following table for each of the last ten years : —

Employees and Equipment, 1898–1907.

YEARS.	Employees.	Cars.	Other Cars and Vehicles.	Electric Motors.
1898,	10,416	5,734	1,997	7,643
1899,	11,944	6,042	2,076	8,530
1900,	12,766	6,531	2,371	9,545
1901,	14,749	6,997	2,488	11,284
1902,	15,292	7,144	2,577	12,504
1903,	15,823	7,403	2,644	13,611
1904,	16,519	7,383	2,728	13,870
1905,	16,479	7,341	2,761	14,167
1906,	16,909	7,336	2,874	14,492
1907,	18,181	7,539	2,900	15,626

STREET RAILWAY ACCIDENTS.

The whole number of persons injured in connection with street railway operation, as returned by the companies for the year ending September 30, 1907, was 6,853, of whom 99 received fatal injuries, and 6,754 injuries not fatal.

The number of passengers injured was 4,879, of whom 23 were injured fatally.

The injuries to employees were 321 in all, 13 of which were fatal.

The number of injuries to travellers and others on the street was 1,653, of which 63 were fatal.

These figures include a very large number of injuries of a trivial character that have been returned by the companies.

In the following table the accidents of the last year as returned are classified as above, and are compared with those of the previous year : —

Summary of Accidents Returned in 1906 and 1907.

KILLED AND INJURED.	KILLED.		INJURED.		TOTALS.	
	1906.	1907.	1906.	1907.	1906.	1907.
Passengers, . . .	11	23	5,147	4,856	5,158	4,879
Employees, . . .	15	13	350	308	365	321
Other persons, . . .	42	63	1,360	1,590	1,402	1,653
Totals, . . .	68	99	6,857	6,754	6,925	6,853

From the above table it appears that 12 more passengers, 2 less employees, and 21 more travellers and other persons on the street, received fatal injuries than in 1906.

Of those receiving injuries not fatal, there were returned 291 less passengers, 42 less employees, and 230 more travellers and other persons on the street, than in 1906.

Altogether, there appear to have been injured, fatally and otherwise, 279 less passengers, 44 less employees, and 251 more travellers and other persons, making 72 less accidents returned by the companies as having occurred during the last than the preceding year.

Respectfully submitted,

FRED E. JONES,
Statistician.

STREET RAILWAY BRIDGES.

Honorable Board of Railroad Commissioners.

GENTLEMEN: — I beg leave to submit the following brief statement with regard to the street railway bridges in this Commonwealth for the year ending June 30, 1907.

During the past year further examination has been made of the various structures over which the street railways pass, and this work has been completed for all the street railways with the exception of the Old Colony and the Boston and Northern systems. With this exception we now have a complete card catalogue of every bridge and are informed as to its present physical condition, and in the future it will be comparatively easy to keep track of these street railways and to see that they are examined at proper intervals.

The condition of steel bridges over steam railroads requires careful and frequent examination, as some such bridges which have been recently uncovered have shown great reduction in strength, owing to

the corrosive action of the smoke and steam from the locomotives. No paint is proof against this combination of chemical and mechanical action, and the only safe and permanent plan appears to be to encase the steel in a covering of concrete or plaster or some other material which will not corrode.

No table is presented with this report with reference to the number of bridges of different kinds, but when the examination of the Old Colony and the Boston and Northern systems is completed, as it will be shortly, such a table can be presented which will be complete.

During the past year the different street railway companies have done considerable work in altering, strengthening and rebuilding bridges. A good deal of a minor character has been done, together with a good deal of work of magnitude. The most extensive strengthening that has been carried out during the year has perhaps been the rebuilding and strengthening of the steel trestle on the Old Colony street railway at Raynham, 752 feet long. This work is an illustration of the short-sightedness with which some of our street railways have been constructed in the past. It was built only ten years ago, but as the traffic increased and heavier cars were run it was soon found to be too light. Within ten years from the time it was constructed it has been found necessary to largely rebuild it.

The new bridges which are being constructed by street railways in the Commonwealth are designed for heavy cars, and it is hoped and expected that they will prove to be more enduring.

Respectfully submitted,

GEO. F. SWAIN,
Bridge Engineer.

ISSUES OF STOCK AND BONDS.

Issues of Capital Stock.

RAILWAY COMPANIES.	Date when Authorized.	Amount Authorized.
	1907.	
Berkshire,	April 18,	\$250,000
Boston & Northern,	January 2,	300,000
Boston & Worcester,	October 28,	300,000
Brockton & Plymouth,	September 12,	110,000
Fitchburg & Leominster,	September 17,	250,000
Holyoke,	December 23,	93,600
Lowell & Fitchburg,	January 12,	75,000
Old Colony,	January 2,	200,000
Springfield,	March 9,	300,000
Springfield & Eastern,	July 17,	530,000
West End,	March 30,	420,000
West End,	December 20,	1,010,900
Worcester & Holden,	November 2,	40,000
Worcester & Southbridge,	March 6,	50,000

NOTE.—Issues of capital stock for the purpose of consolidation will be found in the Appendix.

Issues of Bonds.

RAILWAY COMPANIES.	Date when Authorized.	Amount Authorized.
	1907.	
Boston Elevated,	June 15,	\$5,800,000
Boston & Northern,	November 15,	410,000
Boston & Worcester,	November 13,	300,000
Concord, Maynard & Hudson,	November 15,	10,000
Gardner, Westminster & Fitchburg,	March 7,	35,000
Lowell & Fitchburg,	January 30,	75,000
Old Colony,	November 15,	200,000
Pittsfield Electric,	April 8,	100,000
Uxbridge & Blackstone,	July 17,	40,000
Worcester Consolidated,	October 9,	1,000,000
Worcester Consolidated,	December 10,	200,000

GENERAL DISCUSSION.

Hon. James F. Jackson, Chairman of the Board since 1899, resigned December 1, 1907. Walter Perley Hall, Esq., was appointed his successor, and assumed the duties of the office December 23, 1907. Mr. Jackson's colleagues on the Board desire to make acknowledgment of his broad legal knowledge, his eminent fairness, his unfailing devotion to the public welfare, and the high standard of action that he has brought to his official service.

ELECTRIC RAILROADS.

After careful inquiry and extended debates the Legislature of 1906 passed an act, chapter 516, authorizing a new type of transportation — electric railroads. Under the provisions of that act five different companies in process of formation petitioned the Board for the issue of certificates that public convenience and necessity required the construction of their lines. One of these petitions is now pending, one was held to await further study and development, two were dismissed for sufficient reasons, and one certificate was issued. Under the authority so conferred that company is now endeavoring to obtain from the city of Boston and the boards of selectmen, of the towns included in the route, locations upon which to build its road.

In rendering its decision the Board stated its views as follows: "The question to be decided under each petition is whether, upon the whole, the net results of the proposed undertaking promise public gain or public loss;" and further, that "It surely cannot be said that public necessity and convenience require the building of an additional railroad if the effect upon existing railroads is so disastrous that the service as a whole is impaired rather than improved."

Practical experience with the new law indicates the necessity of perfecting amendments in addition to those passed during the last session of the General Court.

SMOKE FROM LOCOMOTIVES.

During the year a special study of possible methods of reducing excessive smoke from locomotives has been undertaken. Numerous complaints have been received, and investigation indicates that many of them were well grounded. To aid in this investigation the Board in July appointed as one of its inspectors a man with large experience in the care and management of locomotives, and to him was assigned the special duty of ascertaining what could be done in the way of lessening the annoyance from this cause, while members of the Board made studies, both at home and abroad as to actual conditions in other places.

The inferior grades of coal make much more smoke than the better grades, and financial considerations create an incentive for maintaining a low standard. The different railroads have been experimenting to a greater or less extent with various types of smoke-consuming devices, but as far as we have been able to learn, none of them have proved satisfactory. It will be generally recognized that the human element is the greatest factor in reducing smoke from locomotives using soft coal. We recommend that the managements of railroads operating trains in and about Boston give careful attention to the orders heretofore made by the Board relative to minimizing the volume of smoke from their locomotives.

The source to which the general public may rightfully look for final relief from the smoke nuisance is the use of electricity as a motive power and the abandonment of steam locomotives. The recent successful installation of electricity on railroads in this country and in foreign countries has removed all doubt as to the practicability of its use for the transportation of passengers. There only remains for demonstration the type to be installed which will provide the public with a safe and reliable service at the lowest cost obtainable.

The time is fast approaching when electricity as a motive power must be installed on railroads operating in and about Boston, at least, and to that end the work of preliminary investigation should be consummated, that the situation may eventually be met with intelligence and despatch. We there-

fore further recommend that studies be prosecuted and completed at the earliest possible date relative to the whole question of electric installation.

ABOLITION OF GRADE CROSSINGS.

Returns from the various railroads, published elsewhere in this report, show a reduction of eleven in the total number of grade crossings of railroads and highways. Under the provisions of law which permit the abolition or alteration of crossings by agreement of parties, four proceedings have received the approval of the Board; while under the recent law which permits the court to appoint the members of the railroad commission as a special commission, reports have been rendered relative to crossings in the towns of Barnstable and Blackstone. Certificates approving eight reports of special commissions have been issued.

Since the beginning of this work under general law, a total of \$29,221,380.86 has been expended. The expenditures for the abolition or alteration of grade crossings by the different railroad companies since the original act of 1890 have been \$17,712,709.95; by the Commonwealth, \$7,614,070.28; and by the cities and towns, \$3,856,411.69; \$38,188.94 having been paid from the Metropolitan Parks Loan Fund.

The Board suggests that Acts of 1906, chapter 463, part I., section 29, be amended by a provision that when the board of railroad commissioners acts as a special commission to abolish grade crossings no certificate shall be required under part I., section 43, of the same act.

SPARK ARRESTERS ON LOCOMOTIVES.

After public hearing and investigation, the Board, under chapter 431 of the Acts of the Legislature of 1907, approved the installation and maintenance on engines in use on the Boston and Albany, Boston and Maine, Boston, Revere Beach and Lynn, Central Vermont and the New York, New Haven and Hartford railroads of spark arresters of a standard type.

It is expected that the maintenance by the companies of a system of rigid inspection of these devices will result in the better protection from fire of woodlands adjoining railroads.

FIRE EXTINGUISHERS.

Under chapter 283 of the Acts of the Legislature of 1906, the Board, after a public hearing and an investigation of the different types of fire extinguishers, ordered that every passenger, baggage, mail and express car owned or regularly used by railroads in the State be equipped with fire extinguishers of an approved pattern.

VENTILATION OF CARS.

In discussing the problem of proper ventilation of cars in the last annual report it was stated that the inquiry had not yet been completed. The investigation has proceeded through the year, and in the closing days of the service of the retiring chairman the following report was prepared, which the Board believes should be submitted in its annual report to the General Court, rather than issued as a general order :—

HEATING AND VENTILATION OF CARS.

The Board has recently changed its requirement with reference to the point of outside temperature at and below which companies are called upon to heat street cars, making that point forty instead of fifty degrees above zero, the temperature to be then maintained to have a range that shall not be lower than forty nor higher than sixty degrees. In making this radical change and certain other changes, the Board has had in view a rule that companies will find it possible to obey, and that the district police can enforce under the statute which makes them responsible for its enforcement.

It is notorious that opinions differ as to what the temperature of a room in a private house ought to be, and that the same person entertains different opinions at different times, according to condition of health or circulation of blood. Obviously, then, an attempt to always satisfy every occupant of a street car with the atmospheric conditions must be futile. Even if passengers were of the same mind, it is impracticable to constantly maintain air of a given quality and the temperature at a specific point in a car that is one moment nearly empty and the next crowded to the limit; now stationary, then in motion; with doors continually opening and shutting, and with an outside temperature varying between zero and forty degrees above.

Companies are not, however, relieved from the obligation to keep the air in cars reasonably warm and pure on account of the difficulties

in the way of doing this to the satisfaction of every critic. In fulfilling their obligation both management and employee must expect to deal with the old and young, with the robust and feeble, with those who thrive on draughts of cold air and with those to whom such draughts are fatal; with those who are dyspeptic and nervously unsound, as well as with the sane and cheerful.

The day of horse cars, with straw on the floor to keep the feet warm, and with no ventilation except that afforded through the doors, is within easy recollection. While to-day the electric heater exemplifies radical progress in heating, the ventilator commonly in use is about as crude as any device could be. It is true that a number of experiments have been made, that a ventilator of improved type is now found in the semi-convertible cars upon the Boston and Northern and upon the Boston Elevated lines, and that another device, which promises as good if not better results, is found in cars of the elevated trains; but that there has been, however, a too general indifference on the subject of ventilation cannot admit of question.

After all is said, however, in support of theories and devices for heating and ventilating cars, present discomfort is due fully as much to the failure to properly use means at hand for keeping the air pure and warm as to imperfection in apparatus. There is no reason why, for example, a movable ventilating window should be kept entirely open or entirely shut, or in any one position throughout a long journey, in total disregard of the temperature outside and of the changing conditions inside the car.

It should be a part of the regular duty of those in charge of cars to regulate both heating and ventilating apparatus from time to time to meet varying needs. Admirable work of this kind is now done by individual conductors, and there is no reason why their success in caring for the public should not become a general feature of the service. Co-operation, too, between passengers and employees is of great benefit to both, and the privilege of making suggestions ought not to be monopolized by the chronic complainant.

The Board must ask that companies adopt prompt measures for a larger experimental use of the more improved methods of ventilation, and meanwhile enforce rules for adjusting all devices in use to existing conditions.

JAMES F. JACKSON,
Chairman.

The Board has nothing to add to the views expressed in the foregoing statement.

STREET CAR FENDERS AND WHEELGUARDS.

During the past year, street railway companies, at the suggestion of the Board, have installed for experimental use various types of fenders and wheelguards on certain lines in different parts of the State. The efficiency of these devices can best be determined from the results of their use in actual tests in saving life and limb; such tests have been too infrequent to enable the Board to reach any definite conclusion. One of the results of this investigation, however, has been to eliminate from the field many so-called fenders and wheelguards on account of their absolute inefficiency.

The Board deems it necessary to reiterate its views that no particular fender or wheelguard has yet been found the adoption of which can be recommended in preference to all others; and that the greatest safeguard in street railway operation comes from having the cars at all times under such control as to avoid striking a person, rather than depending upon any device to save him from harm after having been struck by a moving car.

The Board will continue to investigate and thoroughly test all meritorious fenders and wheelguards, and will insist upon the more general use of any device found to possess sufficient merit to warrant its adoption.

To assist the Board in determining the efficiency of these devices, it is expected that companies will keep a record of all tests through their use.

BLOCK SIGNALS.

The Board, on page 65 of its annual report for 1906, said: "We recommend legislation requiring railroad companies and such street railway companies as run cars under similar conditions, to equip, within a reasonable time, lines of the character above named with a block signal of such type and installed in such manner as the Board may approve."

The Legislature of that year provided the necessary authority to enable the Board to carry out the recommendation. After thorough examination and consideration of signal systems then in use in this country and abroad, and being of the opinion

that all lines of railroad should eventually be protected by some system of block signals, the following procedure for their installation was adopted :—

1. The ultimate end to be secured is the installation of some approved form of block signals upon all steam railroad lines within the state at as early a day as may be practicable. This means a substantial outlay by railroad companies in the immediate future.

2. The order in which block signals should be installed must have reference to both amount of traffic and physical conditions. Of first importance is the equipment of lines of railroad embracing two or more tracks, or presenting the conditions of a single track carrying a large amount of traffic and involving heavy grades and curves. Local conditions may of course demand at particular places early equipment out of the usual order.

3. Companies are requested to submit to the Board on or before the fifteenth day of this month (December) a brief description of the block signals now in use upon their several lines within the State, together with an explanation of such action as has been taken in either actually equipping these lines or in making arrangement for their future equipment with block signals, since the first day of January, 1906.

A summary follows of the orders issued and work done during the year :—

Boston and Maine Railroad.

Ordered, That the approval of the Board be given to the use upon the Boston and Maine railroad of the automatic block signal device known as the Union Electric Semaphore signal.

On January 1, 1907, this company had on its lines in Massachusetts 163.7 miles (computed as single track) equipped with block signals; on January 1, 1908, 313.36 miles, an increase of 149.66 miles, or 91.4 per cent. The equipment of 331 miles additional has been authorized for the year 1908, making a total of 644 miles. The approximate amount expended for this work within the state during the year 1907 was \$173,000, and the estimated amount to be expended for the same purpose during 1908 is \$370,000. This will provide for the installation of block signals on all of this company's double track lines within the state.

Boston and Albany Railroad.

Ordered, That the approval of the Board be hereby given to the use upon the Boston and Albany railroad of mechanical signals as shown on Plate 1; Hall Automatic Electric Disc signal as shown on Plate 2B; Union Automatic Electric Disc signal as shown on Plate 3; Union Electric Banner signal as shown on Plate 4; Hall Automatic Electro Gas signals as shown on Plate 5; and Union Automatic Electric Semaphore signals as shown on Plates 6 and 7; said plates accompanying and being described in the petition.

On January 1, 1907, the number of miles (computed as single track) equipped with block signals on this railroad within the state was 357.2. The number of miles equipped during the year was 74. The number of miles to be equipped during the year 1908 is 23.5. This provides for complete installation on the main line and the Newton Circuit. The amount expended by this company in equipment and installation of block signals upon its lines within the state during the year was \$156,291.28.

Boston, Revere Beach and Lynn Railroad.

Ordered, That the approval of the Board be given to the use upon the Boston, Revere Beach and Lynn railroad of the automatic block signal device known as the Union Electric Semaphore and the Union Disc signals.

On January 1, 1907, the number of miles (computed as single track) equipped with block signals on this railroad was 12. The number of miles equipped during the year 1907 has been 14.4. The work of installation on this line is now completed. The amount expended for this work during the year 1907 was \$18,800.

Boston Terminal Company.

Ordered, That the approval of the Board be given to the use upon the property of the Boston Terminal Company of the interlocking signal system known as the Electric Pneumatic Interlocking Signal system, as shown on blue print marked "The Boston Terminal Company, Diagram of Tracks and Signals at the South Station," on file with the petition.

The signal system at the South station was completed in 1899.

New York, New Haven and Hartford Railroad.

Ordered, That the approval of the Board be hereby given to the use upon the New York, New Haven and Hartford railroad of automatic disc signals as shown on blue print marked "M 35, February 14, 1907;" also standard signals as shown on blue print marked "M 14-A, May 17, 1907," said blue prints being upon file with the petition.

On January 1, 1907, the number of miles (computed as single track) equipped with block signals on this railroad was 401.7. The number equipped during the year 1907 has been 13.7. The amount expended for equipment and installation upon this company's lines within the state during the year 1907 was \$58,675. No signal installations for the year 1908 have as yet been authorized.

We desire to record our satisfaction, not only with the progress of the work, but with the attitude of the officials of these railroads, and with the spirit in which they have co-operated with the Board.

STREET RAILWAYS.

The physical condition of street railways in Massachusetts shows a general improvement over the previous year, large sums having been expended for repairs and renewals, and some of the larger companies having bought many new cars and replaced with more commodious cars the equipment lost or worn out in service.

Among the smaller companies, especially those serving sparsely settled communities, the period has arrived when considerable sums of money must be spent for repairs and renewals of property. Many have been unable to earn a sufficient sum above their operating expenses and fixed charges to place them in the dividend paying class of roads, and the problem in operation for these as well as for some of the larger roads will be, not only that of paying dividends, but of making renewals of track and replacements of rolling stock without impairment of capital.

The public, now so generally dependent upon local inter-urban roads, should be ever mindful that, while it is essential that service should always be adequate, the ideal conditions

can only be obtained through a fair return upon money invested.

Whatever the solution of these difficulties, one thing is evident, that the conduct of street railway companies should be no different from that of other transportation or business corporations in the adoption of a far-seeing policy in the management of properties, and an element always to be commended in such management is that of proper provision in the present for the inevitable needs of the future.

EQUALIZATION OF RAILROAD FARES.

In accordance with chapter 82 of the Resolves of 1907, to provide for an investigation and report concerning the equalization of passenger fares upon railroads, the Board has investigated the general question of fares within the so-called Boston suburban district, and in connection therewith also heard and considered the complaints as to the inequality of railroad fares throughout the Commonwealth. In this inquiry, as has been the case during previous investigations, the fact was developed that the complaints were not so much against excessive rates charged at any given point as against discrimination through the use by certain communities of special forms of tickets, while others under similar conditions had no such privilege.

As the Board has frequently stated, these conditions have resulted from the consolidation of various lines, and in its opinion constitute a valid claim for relief. We recommend, therefore, that there be a readjustment on the different divisions of each railroad, both within and without the suburban district, to the end that communities under similar conditions may enjoy a corresponding rate of fare and form of ticket; and we further recommend co-operation of the managements of all the railroads in the state in bringing about as nearly as may be such a uniform rate of fare and form of ticket, but to make feasible this recommendation the attention of the Legislature is called to the Acts of 1906, chapter 463, part II., section 183.

BOSTON AND ALBANY RAILROAD.

In May 1907, the Legislature adopted the following resolutions : —

Resolved, That the general court hereby expresses its disapproval of the insufficient and faulty freight and passenger service which the recent investigations made by this general court and the board of railroad commissioners show to have been rendered during the past twelve months by the New York Central and Hudson River Railroad Company, as the lessee of the Boston and Albany railroad.

Resolved, That the general court approves the public demand for a better service by the said lessee, and directs the said board to take all lawful, proper and effective measures to obtain the same, and to report to the next general court, not later than January tenth, nineteen hundred and eight, the result of its further investigation of the freight and passenger service on the Boston and Albany railroad.

The Board, in compliance therewith, submits the result of its further investigation of the service on the Boston and Albany railroad as a part of this annual report.

The history of the Boston and Albany situation during the year 1907 is disclosed by the two special reports of the Board to the House of Representatives, March 7, 1907, and May 7, 1907, report on train service complaints, September 26, 1907, statement of train delays, November 11, 1907, this report, and the documents annexed hereto : —

Boston and Albany report, October 31, 1907,

Supplemental report, December 21, 1907,

Addenda to supplemental report, December 24, 1907.

The annual inspection of the Boston and Albany railroad, both within and without the state, was made by the Board September 24, 25, 26, 27. The Board again inspected the main line of the road between Boston and Albany December 20 and 21, for the purpose of comparing conditions then existing with those at the time of the previous examination of the property.

At the September inspection the work of constructing third and fourth tracks and side tracks, was in progress at various points along the line. Since that time thirty-seven miles of

new track have been put into service, and additional tracks have been authorized and work begun. The work of constructing these additional tracks, together with the new engine houses, new repair shops, new coaling stations and new water supplies is being earnestly prosecuted, and new locomotives ordered have arrived and are being put into service.

It therefore appears that during the year the Boston and Albany has made substantial progress in additions to equipment, and the Board is of the opinion that there has been a marked improvement in this aspect of the situation.

During the month of October, 1907, radical changes were made in the maintenance and operating departments of the road, and a new management, with new policies, was placed in control. Frequent conferences and correspondence with these new officials have demonstrated that the company not only realizes the defects of existing conditions, but is determined to actively co-operate with the Board in remedying them. But these conditions have been so bad, and the service so demoralized, that the restoration of a normal status, and the cure of existing defects, must necessarily be a process involving considerable time. An enterprise which has suffered from years of continued deterioration must have a period of convalescence before recovery. The situation, then, should be looked squarely in the face, and the public should realize that the Boston and Albany railroad is now passing through its convalescent stage, and that the period of complete recovery must be in the future.

Improvement is already noted in the operation of the trains, in the loyalty and discipline of the service generally, and in the vigor and enterprise of the management.

There are certain fundamental defects in the system itself that will preclude any hope of ideal service unless remedied. The most notable among these are : insufficient terminal facilities at Boston ; inadequate trackage from the Exeter street yard easterly ; imperfect spacing of trains in and out of the South station ; train schedules based solely upon ideal operating conditions ; the obscuring of signals by locomotive smoke ; and last, but not least, the avowed antagonism of the travelling public to the railroad. It may be urged that the last difficulty

can only be remedied by improvement in the others, but in the opinion of the Board, co-operation of the railroad and the public is an important essential at the present time. To remedy these conditions the Boston and Albany railroad must eventually make large expenditures of money in the way of improved terminal facilities, abolition of the smoke nuisance, and electrification of its suburban lines. To this end new properties must be acquired, and additional tracks constructed. This means that time and money will be required before conditions can be so improved that a service completely satisfactory to the travelling public can be realized. In the meantime, certain existing evils can be met at once. No business corporation, much less one holding the relations to the public of a railroad company, should continue, after a year of failure, to advertise schedules that have not been met, unless the management has every confidence in its ability to meet them in the future. In short, it is as much a fraud on the public to issue time schedules that cannot be maintained as it is to advertise a commodity that cannot be delivered. If the management of the Boston and Albany railroad does not honestly believe that its trains will substantially correspond with its time-tables, it should seasonably arrange to have the time-tables conform to the trains. While this is the age of rapid transit, and the Board would be among the first to regret any step backward in the curtailment of trains or the lengthening of schedules, yet performance is more vital to the travelling public than promise.

The climatic changes that characterize a New England winter are approaching, and disorganization of service will doubtless follow a heavy fall of snow. This is a difficulty that has never been satisfactorily met in the history of the railroads in this state, and so far as this condition may obtain on the Boston and Albany road, it will be different from no other.

A careful study of the complaints received by the Board indicate the feelings of a despondent travelling public. With the improvements in equipment and operation which have been evidenced to the Board, a betterment of conditions in service is expected, and the travelling public has a right to confidently anticipate a substantial improvement in the service; subject,

however, to occasional weather conditions, but it should realize that the problem of delayed trains can only be completely and finally solved by the completion of terminal changes.

Delays in traffic disorganize not only the railroad, but private business as well. While the earnest endeavor of the management to run trains on schedule time is essential, the travelling public, if delays necessarily occur, should be fully advised of the progress of trains, both by train reports conspicuously displayed and information by station masters and others.

In this connection the Board deems it proper to say that the Boston and Albany railroad has no monopoly of delayed trains. But both on the Boston and Albany railroad and elsewhere it should be the first duty of the management to see to it that equipment and operation are kept up to the highest standards of modern railway service, to the end that there be no recurrence of Boston and Albany conditions upon that railroad or any others in the Commonwealth.

We believe an analysis of the accompanying reports of the Boston and Albany railroad will justify the conclusions here stated, and the Board has not deemed it a part of its duty under the resolve to make further or other recommendations. In view, however, of the intimate relations between the question of train delays on the Boston and Albany railroad, and the question of its management, by virtue of the existing lease, we recommend that the New York Central and Hudson River Railroad Company have a reasonable opportunity to make good the assurance given the Board that "the management is endeavoring to fully grasp the situation and will in good faith endeavor to meet it."

WALTER PERLEY HALL,
GEORGE W. BISHOP,
CLINTON WHITE,

Commissioners.

APPENDIX.

APPENDIX.

SPECIAL REPORTS AND ORDERS RELATING TO RAILROADS, STREET RAILWAYS AND ELECTRIC RAILROADS.

ACCOMMODATIONS, FARES, SERVICE.

RAILROAD RATES AND SERVICE.

Special Report on an order passed in the House of Representatives of the General Court relative to service on the Boston and Albany railroad.

To the Honorable the House of Representatives:

The Board of Railroad Commissioners respectfully presents the following information in response to the order of the House of Representatives passed under date of February 28, 1907.

The findings of the Board in connection with its investigation of the train service upon the Boston and Albany railroad called for first, a supply of better fuel; second, additional cars and locomotives; third, an increase in track, yard and terminal accommodation; fourth, a progressive and liberal policy in dealing with present and prospective business.

Substantial progress has been made through action taken by the lessee of this railroad looking to the adoption of these suggestions.

1. Early in January the company met the requirement with regard to fuel by the purchase of fifty thousand tons of an improved and excellent quality of coal.

2. Twenty-five modern coaches have been thus far added to the

suburban service, the last fifteen having gone into commission about ten days ago. An expenditure of \$111,340 has been authorized which will provide for twelve vestibuled coaches to be ready for use at the earliest possible moment. Twenty-seven locomotives, due under an order given more than six months ago, are to be delivered in April. A requisition for sixty-seven more locomotives has been made by Vice-President Van Etten for delivery this year.

3. Early in February among other expenditures authorized was one of \$356,000 to meet the expense of immediate track extensions within this state in connection with other track extension beyond the state line, but connected with the same service. At the same time further expenditures were authorized as follows:—

For coaling plant at Charlton,	\$7,500
For coaling plant at Riverside,	10,000
For addition to shops at West Springfield,	250,000
For new round house at North Adams Junction,	40,000
For addition to Beacon Park round house,	50,000
For new station at Milford,	12,000
For new station at Richmond,	5,000
For the installation of additional block signals,	50,000
For two café cars,	23,500

Plans for increasing terminal facilities in Boston are under active consideration involving the possible restoration of the Park Square property to railroad uses, as well as other radical changes in present conditions. No definite statement of these terminal improvements has yet been matured, but the problem is receiving the close attention which its importance deserves.

Making the allowance for delays that must always occur in the interest of safety, and interruptions at or near the South Terminal station, the record already shows improvement in train service. If, however, as we believe, a service of the proper standard is dependent upon more locomotives to furnish the requisite power, more yards to accommodate freight trains and keep them out of the way of passenger trains, it is obvious that such a standard will not be attained until manufacturers can fill orders, properties be acquired, and tracks and roadbed be constructed. This means months rather than weeks of active preparation before a satisfying betterment in conditions can be realized.

We are assured that it is the purpose of the New York Central management to comply with the recommendations of the Board, and it is our belief that under the direction of Vice-President Van

Etten measures have been inaugurated and are being actively prosecuted to prove the truth of this assurance.

In behalf of the Board,

JAMES F. JACKSON,

MARCH 7, 1907. [6503]

Chairman.

Special Report to the House of Representatives as to Expenditures on the Boston and Albany Railroad.

To the Honorable, the House of Representatives, State House, Boston, Massachusetts.

GENTLEMEN:—In fulfilment of the Order of the House of Representatives of April 15, 1907, the Board of Railroad Commissioners has secured and submits a schedule showing expenditures made upon the Boston and Albany railroad for maintenance, renewals and equipment from July 1, 1890, to June 30, 1900, by the Boston and Albany Railroad Company, and from July 1, 1900, to and including December 31, 1906, by the New York Central and Hudson River Railroad Company, the figures bearing the certification of the auditing officers of the two companies.

The following statement has been received from Vice-President Van Etten in connection with this schedule:—

These expenditures for the period of July 1, 1890, to June 30, 1900, include \$1,791,026.23 expended for the elimination of grade crossings at Newton and Natick and charged to operating expenses under the item Repairs and Renewals of Roadway. The extraordinarily large amounts expended for rail, bridges and buildings for the same period accounts for the decreases in corresponding items for the subsequent period.

The item of 109 new locomotives in the period of July 1, 1890, to June 30, 1900, included 12 locomotives which were paid for and included in the amount expended for maintenance and renewal of locomotives during the period of July 1, 1900, to December 31, 1906.

There will also be noted an item of "Additional Expenditures" advanced by lessee to be eventually charged to capital account, \$1,022,818.48. This amount is carried in a suspense account, and while some of it may be charged to operating expenses, the probabilities are that the amount will be allowed and taken into the capital account, of the Boston and Albany Railroad Company, as per terms of the lease.

To meet the item called for by the House of Representatives as "Equipment expended at East Boston" there are given the figures for

"extending, enlarging, improving and developing the terminal facilities" at East Boston and on the Grand Junction railroad which are \$1,542,251.01 as shown in the statement, an excess of \$292,251.01 above the amount required to be expended under the Act authorizing the lease.

The schedule and statement is presented without comment, it being understood that the purpose of asking this information does not require it.

Respectfully submitted in behalf of the Board,

JAMES F. JACKSON,

MAY 7, 1907. [6541]

Chairman.

STATEMENT OF CERTAIN EXPENDITURES ON THE BOSTON & ALBANY
RAILROAD.

July 1, 1890, to December 31, 1906.

CHARGED TO OPERATING EXPENSES.	July 1, 1890, to June 30, 1900.	July 1, 1900, to December 31, 1906.
Repairs and renewals of roadway,	\$7,270,234 07	\$4,121,741 00
Renewals of rail,	\$2,001,512 77	\$232,838 23
Tons of rail laid,	109,406	19,190
Renewals of ties,	\$1,304,129 87	\$856,110 52
Number of ties laid,	2,669,864	1,471,063
Maintenance and renewals of bridges and culverts, .	\$1,657,176 94	\$876,777 57
Maintenance and renewals of buildings,	\$2,135,755 32	\$825,803 70
Maintenance and renewals of docks, wharves, etc., .	\$238,671 39	\$45,484 54
Maintenance and renewals of locomotives,	\$4,293,389 98	\$4,339,438 23
Number of new locomotives,	109	38
Maintenance and renewal of passenger car,	\$2,226,457 81	\$1,674,173 69
Number of new passenger cars,	95	41
Maintenance and renewal of freight cars,	\$3,310,210 73	\$2,502,101 57
Maintenance and renewal of shop machinery and tools,	\$93,740 56	\$262,946 03
Additional expenditures under above items, advanced by lessee, to be eventually charged to Capital Account,		\$1,022,818 48
Improvements at East Boston and on Grand Jct. R.R.,		\$1,542,251 01

I certify that the above figures for the period of July 1, 1890 to June 30, 1900 are correct.
(Signed) M. E. BARBER, *Auditor, B. & A. R.R.*

I certify that the above figures for the period July 1, 1900 to Dec. 31, 1906 are correct.
(Signed) J. CARSTENSON, *V. P.*

Report on complaints as to train service on the Boston and Albany railroad.

In speaking of the wretched train service over the Boston and Albany railroad ¹ the Board in January said:

The root of the matter is that in too great zeal for economy the administration has been content to risk the comfort and convenience of the traveling public, and has been too slow to appreciate the fact that the maintenance of service and not the maintenance of dividends is to be given the place of first importance, and that if a risk is to be taken it must be the risk of a temporary failure of returns upon capital rather than upon a failure of reasonable accommodations.

The Boston and Albany railroad as a great avenue of transportation affording direct communication between the vast territory beyond our state lines and a chain of the most flourishing cities of New England, ending with the second port of the country, offers a splendid field for railroad enterprise.

Whatever the technical letter of the lease the spirit of the arrangement and the true understanding between the parties warranted the expectation of a liberal and progressive management of this railroad. That and nothing less is to be demanded.

We recommend that the New York Central and Hudson River Railroad Company in dealing with the Boston and Albany division abandon hand-to-mouth methods and adopt a policy of making the expenditure necessary to establish a high standard of train service and to provide the tracks and terminal facilities requisite for the demands of business.

The Legislature by resolution adopted May 23, 1907, endorsed the findings and recommendations made in the paragraphs above quoted, and directed the Board to report at the opening of the next session "the result of its further investigation of the freight and passenger service on the Boston and Albany railroad."

Soon after the demand for improved service the company announced that it had authorized large expenditures for purchase of cars and locomotives, for increasing yards and terminals, and for constructing additional tracks.

It is true that it takes time to secure the delivery of rolling stock and to complete such work of construction. Many months have passed, however, and most exasperating delays and most provoking annoyances continue. The interest once displayed in changes of

¹ This report is printed in the annual report of the Board for 1907, pp. 138-143.

terminal at Boston seems to have died. The new locomotives have not appeared, no additional tracks are yet in use.

The patience of patrons has been exhausted in waiting for promised relief and the question is naturally asked whether the railroad management has ever really grasped the situation and in good faith endeavored to meet it.

To answer that question upon complete information the Board has been making an inspection of roadbed, tracks and locomotives and now asks the company to submit a statement of all expenditures made or authorized, of all work done or inaugurated, and of all plans adopted for improving the service in accordance with the suggestions that have been made. The company is also asked to submit a record for the three weeks ending with the nineteenth day of October which will give all actual delays of more than ten minutes in train service covering runs of not less than twenty-five miles, this record to include time lost by through trains between Boston and Albany. Though the official report of the Board must under the resolution above named be presented to the Legislature in January existing conditions demand the present inquiry and such finding as the facts dictate.

For the Board,

JAMES F. JACKSON,

SEPTEMBER 26, 1907. [6368]

Chairman.

Special report on train delays and service upon the Boston and Albany railroad.

The record of train delays upon the Boston and Albany railroad for the three weeks ending October 19 is so bad that there is no occasion to analyze it. The service as a whole has been growing worse rather than better during the past eight months as must have been the case with locomotives overtaxed and tracks overloaded.

It has become evident that the expenditures authorized in February were on too frugal a scale and that the work of improvement was tardily begun and ineffectively prosecuted, in brief that there has been a failure to meet the emergency which the situation presented.

Discouraging as this conclusion is and destructive as it must be of faith in assurances, the problem of the future is to be met in no spirit of hostility toward any man or men but with a sane study of past and present conditions. The vital question is whether the

outlook today is any better than it was six weeks ago. Notwithstanding a succession of disheartening mishaps and disasters, untoward events in the financial world, and the fact that winter is at hand, that question in our opinion ought to be answered in the affirmative.

No impartial critic in possession of all the facts can fail to note the signs of a thorough understanding at last of the troubles which have caused disaster and of a new administrative purpose to drop superficial treatment of symptoms and to get at the real disease. This is observable in the change in the operating department which brings the Boston and Albany division in closer touch with the whole system; in a recognition of the need of a larger number of locomotives than that already ordered; in the extension of track building to complete lines that will prevent interference between freight and passenger traffic; in enlarging plans for yards and engine houses and in steps that signify an interest in re-establishing the old time esprit de corps so sadly missed in recent years; finally in the new vigor and enterprise infused into work on new construction that for the first time is making expense a matter of secondary consideration.

It is not our intention to discuss in detail the recent statement of the company. The Board will submit a final report on this service to the Legislature at the close of the year, when an opportunity will have been afforded for a further demonstration by the company of its purpose for the future under this lease.

The patience of the public has been sorely tried, but proof that skill and energy loyally backed by the resources of the New York Central are battling with adverse conditions in a determined effort to reform this service will go a great way toward restoring confidence.

Meanwhile it may be suggested that a part of the criticism which has been so lavishly expended upon the Boston and Albany might well be diverted to the record of trains upon other railroads, where in varying degree there have also been delays, in some instances a lamentably frequent difference between actual and schedule time.

For the Board,

JAMES F. JACKSON,

NOVEMBER 11, 1907. [6368]

Chairman.

Complaint of Francis G. Hayes and others concerning train service on the Milford branch of the Boston and Maine railroad.

Under the new train schedule upon the Boston and Maine railroad the train over the Milford branch which formerly connected at Ayer with the train leaving Boston at about five o'clock, now connects with the train which leaves Boston at four o'clock.

This change was made in the belief that it would accommodate residents of Pepperell without materially discommoding passengers for other points. That the change which means a better distribution of trains between Boston and Pepperell meets with general favor among business men of that town is undoubtedly true; but the result of our investigation convinces us that the new order of things is a great inconvenience to several persons who travel daily upon this train, and to a large number of persons who from time to time rely upon a later connection at Ayer in order to reach their different points of destination.

Weighing the claims of all interested, it is our opinion that those who protest against the new schedule are entitled to the train connection formerly enjoyed, and we therefore recommend that the necessary rearrangement be made.

For the Board,

JAMES F. JACKSON,

JULY 9, 1907. [C954]

Chairman.

Petition for additional train service on the Boston and Maine railroad between Winchester and Woburn.

In October, 1905, the train which formerly left Boston at 6.20 P.M. for Wilmington by way of Woburn was withdrawn from the Woburn branch and has since been running over the main line. This change was made in the interest of a larger accommodation to the traveling public. To meet the wishes of people who desired to be carried from East Cambridge to their homes in Woburn a cab train service was run between Winchester and Woburn until June, 1906, when it was withdrawn owing to lack of patronage.

The Board is now asked to recommend some kind of train accommodation for people who have occasion to travel daily from East Cambridge to Woburn at the close of the working day. The company is unwilling that the train now running express to West

Medford should be stopped at East Cambridge since, such an arrangement would interfere with other important service, and the company is undoubtedly right about that. The only relief that seems to be open is another trial of the cab train. While the former experiment showed that the patronage was exceedingly small the assurance is given that this accommodation would now be a convenience to a considerable number of persons.

The Board is of the opinion that the petitioners should be given a chance to prove this and therefore recommends that a cab train be run for their accommodation between Winchester and Woburn for an experimental period of sufficient length to furnish a fair test of the public convenience.

For the Board,

JAMES F. JACKSON,
Chairman.

MARCH 20, 1907. [C873]

Second Report.

Some time ago the board was asked to recommend a cab service between Winchester and Woburn. Assurance was given that at least ten persons would be accommodated daily, and upon the express understanding, which met with the approval of those asking this service, that the patronage would be at least as large as that, the Board recommended the experiment.

The patronage has proved decidedly less than promised, the outcome having been that predicted by the management as the result of former experience.

Under these circumstances the Board cannot ask the company to longer continue this cab train.

For the Board,

JAMES F. JACKSON,
Chairman.

JULY 29, 1907. [C873]

Request from residents of Cape Ann for additional train service on the Boston and Maine railroad.

C. H. CLEAVES for petition.

C. E. LEE for company.

The travel between Boston and Gloucester is large, a recent count

showing an average of more than one hundred and fifty passengers upon the principal morning train. While trains are frequent and well timed there is no express service, trains that now run express between Montserrat and Boston stopping at all stations upon the branch.

A patronage of this character between these cities if maintained, warrants in our opinion a daily express train at a convenient time in the morning and at night. The argument of the company seems to assume that this service could not be afforded without depriving large numbers of patrons who take trains between Gloucester and Montserrat of accommodations now enjoyed. It is not at all clear to us that such a sacrifice is involved, and we therefore recommend the express service which the petitioners desire.

For the Board,

JAMES F. JACKSON,

AUGUST 6, 1907. [6563]

Chairman.

Complaint of John B. Ratigan relative to charge for transportation of baggage between Falmouth and Falmouth Heights.

It has been a practice with railroad companies to sell tickets between different points and Falmouth Heights, these tickets including a coupon which provides for stage ride to and from the station of the New York, New Haven and Hartford railroad at Falmouth.

It seems that the proprietors of the stage line, while recognizing the coupon as good for the fare of the passenger, have collected an additional charge for his baggage. One who had purchased at a railroad station a coupon ticket of this kind would expect, and the printed conditions upon the ticket would confirm him in the belief, that the coupon covered personal baggage. Therefore, passengers who have been compelled to pay an extra charge for baggage have had a just cause for complaint.

If the railroad companies undertake to act for the proprietors of the stage line in selling tickets the arrangement should be complete and should provide for transportation of personal baggage as well as of passengers in conformity with the usual rule that governs railroad travel.

For the Board,

JAMES F. JACKSON,

OCTOBER 2, 1907. [C1025]

Chairman.

STREET RAILWAY FARES AND SERVICE.

Petition of the selectmen and board of public works of Arlington relative to transfers on the Boston Elevated railway.

H. D. HARDY }
J. A. BAILEY } for petition.

C. S. SERGEANT for company.

While other matters were touched upon at the hearing the principal grievance was that of passengers who ride upon the elevated system between Boston and Arlington Heights and who claim that they are discommoded by the rule which limits their transfer at Harvard square to Arlington cars. They ask the right of transfer at that point to cars for North Cambridge, and at North Cambridge to cars for Arlington Heights. It is claimed that at busy hours the cars to which they are now obliged to transfer at Harvard square are apt to be crowded, while cars running to North Cambridge have room to spare. The company answers that it is furnishing extra cars for the benefit of those who ride between Harvard square and Arlington Heights.

It seems unnecessary to say more than that proper accommodation ought to be furnished either in one way or the other, either by granting the transfer which is desired or by providing at Harvard square a sufficient number of extra cars, and that the company ought to be allowed its option as to which method it adopts.

For the Board,

JAMES F. JACKSON,

MARCH 16, 1907. [6418]

Chairman.

Complaint concerning transfers upon the Boston Elevated railway at Scollay square.

A large number of the Cambridge cars which for years had been running to Scollay square and then down Cornhill have recently upon approaching Scollay square been diverted through Hanover street, a change necessary to relieve the crowding of cars upon a section of Washington street.

Passengers upon the cars that now turn down Hanover street complain that they ought to have the same right of transfer to the elevated system at Scollay square that was given when these cars turned at Cornhill. Upon the cars which still run to Cornhill the

transfer is continued and passengers can change from other cars to those in Cambridge. Such change, however, is not agreeable and the issue of transfers only upon the Cornhill cars leads at times to the crowding of some of the cars while others are running over the same line with abundant room.

The company claims that there has been no withdrawal of transfers but that certain cars have been properly diverted to tracks which do not bring them within the statute requiring transfers at "all stations of the elevated lines reached by surface lines." If the complainants are right in their claim that the action of the company amounts to a withdrawal of transfers such withdrawal is unlawful for the reason that the Board has not consented to it. It may be added that the Board will not consent to any withdrawal of these transfers.

Should the company desire to test its claim that there has been no withdrawal of transfers within the meaning of the law the facts can be called to the attention of the courts in some proper proceeding. Otherwise the transfers issued when the cars turned at Cornhill should, in our opinion, be given upon the cars that now turn down Hanover street.

For the Board,

JAMES F. JACKSON,

MARCH 16, 1907. [6471]

Chairman.

Complaint concerning transfers upon the Boston Elevated railway at State Street station.

Under the present rule passengers between South Boston and East Boston are compelled to transfer from surface cars on Atlantic avenue to elevated trains at the Rowe's Wharf station and from the elevated trains to the tunnel cars at the State street station. What they wish is the privilege of staying in the surface cars and transferring from them directly to the tunnel cars at the State street station.

We think that the request is a reasonable one, and recommend that it be granted.

For the Board,

JAMES F. JACKSON,

MARCH 14, 1907. [C852]

Chairman.

Complaints concerning service on the Boston Elevated railway in East Boston.

Not long ago, upon the suggestion of patrons desirous of quickening the running time of cars, several stops which for many years had been regularly made upon the Lexington street line of the Boston elevated system in East Boston were discontinued and passengers who had been in the habit of taking cars at these points have since been obliged to take them at other points.

Upon weighing the advantages and disadvantages occasioned by this change the Board is of the opinion that the benefit received by a part of the traveling public as the result of the change is not sufficient to outweigh the inconvenience which the change occasions to another part of the same public. In consequence we recommend that the old practice of making these stops be resumed.

For the Board,

JAMES F. JACKSON,

MARCH 9, 1907. [C904]

Chairman.

Complaint of East Boston Citizens' Trade Association and of others relative to service upon the Boston elevated railway in East Boston.

N. C. McNAUGHTON for petition.

C. S. SERGEANT for company.

The East Boston tunnel was constructed at great cost, and the service upon all connecting street car lines ought to be of a character to comport with the magnitude of that undertaking and aid in bringing about a full realization of the rapid transit that the tunnel was designed to secure.

There has been of late dissatisfaction on the part of many residents of East Boston with the accommodation furnished upon these street lines. Several factors have contributed to it, one, the interruption of travel occasioned by the closing of the Meridian street bridge; another, changes following the inauguration of a new local administration; and third, some decrease in service on Lexington street. Irregularities in the running of cars have been the natural incident of these disturbing conditions.

With the opening of the Meridian street bridge and restoration

of former service on that line, and with the discontinuance of transfer from one car to another in travel to and from Jeffries Point, and with the other changes accompanying the rearrangement of the service which is to take place within the next few weeks, there should be a very material improvement in the situation.

As soon as the new order of things is established the Board will detail an inspector to investigate and report upon the service that is then furnished with a view to such action as the public interests may require.

For the Board,

JAMES F. JACKSON,

OCTOBER 18, 1907. [C968-C1008]

Chairman.

Petition of Boston aldermen for night service of cars through the East Boston Tunnel.

Under date of January 21, 1907, the board of aldermen of the City of Boston passed the following order:—

Ordered, that the Railroad Commissioners be hereby requested by this board to grant permission to or issue an order authorizing the Boston Elevated Railway Company to run cars all night through the East Boston Tunnel.

The mayor of Boston has also urged upon the Board reasons why this additional service should be rendered.

The Boston Elevated Railway Company admits that it would be practicable to provide a night service in this tunnel although it insists upon the necessity of discontinuing the running of cars in the subway during a part of the night in order to afford suitable opportunity for the inspection of tracks and equipment and the making of necessary repairs and renewals.

Two years ago the Board expressed the belief that although there was then no such demand as would warrant a night service through the tunnel there might "be in the not distant future a controlling public need for" such a service.

In our opinion that need has now been fairly proved through the changing conditions of the traffic and the increased importance of travel at night in this direction. The petition is therefore

granted and a recommendation made that the company furnish a night service through the East Boston tunnel.

JAMES F. JACKSON,
GEORGE W. BISHOP,
CLINTON WHITE,

FEBRUARY 2, 1907. [6456]

Commissioners.

Complaint of mayor and aldermen of Malden concerning street railway service in that city.

JOSEPH WIGGIN for petition.

B. W. WARREN for Boston & Northern company.

F. E. SNOW for Boston Elevated company.

The Boston Elevated and the Boston and Northern railways both occupy locations in the streets of Malden. The fact, however, that one of the important thoroughfares of the city is served in part by one and in part by the other of these two systems has been a barrier to the enjoyment of a single five cent fare between all sections of the city.

The same conditions exist at nearly all other points where inter-urban railways connect with the system of the Boston Elevated Railway Company. The peculiar privileges granted to that company under special laws include the right to insist upon a five cent fare from every passenger, a right that stands in the way of any arrangement for a joint fare to be shared with other companies.

The Board has no authority to suggest that the Boston Elevated relinquish a part of the fare to which it is entitled by law, and it cannot rightfully ask the Boston and Northern to render services without compensation; nor has it any jurisdiction over extensions of railway lines or changes in the control or ownership of such lines. Under these circumstances no action is open upon this complaint which will afford the complainants the facilities which they are so much interested in securing.

For the Board,

JAMES F. JACKSON,

MARCH 7, 1907. [6328]

Chairman.

Complaint of John P. LaPointe and others concerning service on the Connecticut Valley street railway.

The line of railway which is subject of criticism is that which runs between Millers Falls and Turners Falls. It is claimed by the management that this line is operated at a loss and that under the original grant of location in the town of Montague the company is not called upon to operate it at all during a part of the year.

The character of the territory traversed and of the patronage given would seem to verify the claim that the line is operated under present conditions at a loss. But the question is not one of fares nor of the right to discontinue service, simply the question whether a company that undertakes to furnish a street railway service can justify a failure to provide proper accommodation upon the plea that the service is unprofitable.

Our investigation shows that there are regularly in use between Millers Falls and Turners Falls small cars which are almost daily overcrowded by men and women going to and from their work in the morning and at night. The company in exercising the privileges which have been granted to it is bound to provide either larger cars or more cars so that patrons can travel with a reasonable degree of comfort and convenience.

A similar conclusion was reached upon a complaint against the service rendered upon another street railway, the decision being found on page 19 of the annual report of the Board for 1905.

For the Board,

JAMES F. JACKSON,

NOVEMBER 2, 1907. [C1040]

Chairman.

Petition of citizens of Milford as to fares and service on the Milford and Uxbridge street railway.

In 1903, the Board, on a petition from citizens of Milford concerning rates of fare upon this railway, recommended a reduction through the use of a special ticket. The financial condition of the company would not seem to warrant the recommendation of a further reduction, and for the same reason we decline to recommend a three-cent fare between Milford and Hopedale; but at the hear-

ing it was shown that many patrons are obliged to pay a ten-cent fare within the town limits of Milford, and this for short distances; therefore the Board recommends, for an experimental period of one year, a system of transfers which will enable a passenger to travel within the limits of that town for a five-cent fare.

We believe that the company is making reasonable efforts in the public interest to operate a late car connecting with the Boston and Albany trains at Milford, and do not recommend any change in the present arrangements.

For the Board,

CHARLES E. MANN,

DECEMBER 3, 1907. [6793]

Clerk.

Petition of the Needham Board of Trade relative to fares and service on the Newton and Boston street railway.

A. D. CLAFLIN for company.

W. G. MOSELEY for petition.

The practice upon our street railways of charging five cent fares is not an example of what is known as the zone system of tolls and therefore, as held in a former decision, fare limits ought not to be governed wholly by distance, but should have reasonable reference to the communities which are served.

The Newton and Boston Street Railway Company with its proposed changes in route of cars ought to reestablish fare limits under this principle. Such change would benefit many patrons even though the management could not be asked to extend it to meet the demands of all who seek a five cent fare.

A list of questions has been filed today by counsel for some of those who complain of existing fares. These questions will be submitted to the company for answer, but meanwhile the Board will suggest an early conference between parties with a view to prompt action for the purpose of securing at once such benefits as can be secured through the application of the rule above named.

For the Board,

JAMES F. JACKSON,

OCTOBER 1, 1907. [6686]

Chairman.

Complaints of citizens concerning street railway service and fares in Newton.

S. L. POWERS for companies.

W. S. SLOCUM for city.

B. P. GRAY for complaint.

The hearing upon the several petitions relating to withdrawal of transfers and changes in the street car service in Newton has been adjourned from time to time to await the outcome of conferences between representative citizens and the railway management.

Through these conferences there has been a practical adjustment of all questions except that of a fifteen minute service between Lake street and Newton Centre. The company has offered to give such a service in the morning and at night, while the demand is for such a service throughout the day.

In our opinion the company can fairly be asked to give a fifteen minute service to the full extent that this can be rendered by one additional car and crew with the understanding that the same service throughout the day will be required if at the end of an experimental period the patronage proves sufficient to warrant it. To carry out this view the Board recommends that from the first day of April, 1907, until the first day of October, 1907, the company provide a fifteen minute service on this line from eight o'clock in the morning to six o'clock at night with an hour out at noon for the accommodation of employees, and that a record be kept by the company which will show the number of passengers carried.

For the Board,

JAMES F. JACKSON,

MARCH 9, 1907. [6380-6451]

Chairman.

Petition of the Newton and Boston Street Railway Company relative to transfers in Newton.

S. L. POWERS for company.

W. S. SLOCUM for city.

B. P. GRAY for Newton Centre Improvement Association.

After an experiment with the discontinuance of transfers covering a period of two years, the management of the Newton and

Boston Street Railway Company, as the result of conferences with representative citizens, has decided to restore the transfers which have been withdrawn; and asks our approval of the plan of putting these transfers again in force upon the first day of March, 1907.

This arrangement, being agreeable to all concerned, is approved.

For the Board,

JAMES F. JACKSON,

FEBRUARY 2, 1907. [6393]

Chairman.

Petition of the selectmen of Oxford for regulation of fares upon the Worcester and Southbridge and the Worcester and Webster street railways.

From the evidence given at the hearing it appears that five, ten and fifteen cent fares are collected within the limits of Oxford. The petitioners desire a five-cent fare over either of the through lines in the town. Owing to the long distances covered and other existing conditions we do not think that the company should be required to make the reduction asked.

The fifteen-cent fare applies to travel over lines owned by two different companies, which are now operated by one interest. We believe this fare can properly be reduced to ten cents, and therefore recommend that such a reduction be made.

For the Board,

CHARLES E. MANN,

DECEMBER 5, 1907. [6770]

Clerk.

Petition of Quincy Board of Trade concerning fares on the Old Colony street railway from Quincy to Nantasket Beach.

About one year ago the Board recommended that the twenty cent fare between Quincy Centre and Nantasket Beach be reduced to fifteen cents and suggested the use of a ticket as a means of carrying this reduction into effect.

Complaint is made that the stores where these tickets have been on sale are so far away from the places of business and homes of

many who live along this line as to practically deprive them of the benefit of the lower fare.

The complaint seems well founded, and the Board recommends that the company either place these tickets on sale by conductors or arrange for a collection of a cash fare of fifteen cents.

The Board is also asked to recommend an extension of this fifteen cent fare to all parts of Quincy.

While this concession ought to be made as soon as there is good reason to believe that it can be done without serious loss to the company we cannot recommend it at this time. There are lines of cars which a company is bound to operate, even at a loss, making good the deficit out of the receipts of the system as a whole, but they are lines where there is a continuous need of transportation at lower rates rather than lines used only on occasion or in a certain season for excursion purposes.

For the Board,

JAMES F. JACKSON,

OCTOBER 24, 1907. [6725]

Chairman.

Petition of West Newbury Citizens relative to conditions at junction of Boston and Northern and Citizens' Electric street railways.

The journey by street railway between West Newbury and Newburyport is in part over the Haverhill line of the Boston and Northern and in part over the Citizens' Electric street railway. The cars of the two companies are run upon different schedules and for a long time there has been not only a lamentable failure to make connection but apparently an utter indifference to the resulting discomfort to which passengers have been subjected by reason of such failure.

A commendable effort has now been made through joint action by both companies which is expected to provide a remedy for existing evils through the use of a newly constructed siding. This change has already relieved patrons from the hardship of waiting by the roadside. To what extent it will lessen delays the experience of the next few weeks will demonstrate.

If unreasonable delays continue to be frequent, other changes in service ought to be made. There is no good reason why these connecting railways should not furnish a practically continuous

journey for patrons who rely upon them in daily travel between their homes and places of business.

For the Board,

JAMES F. JACKSON,

OCTOBER 23, 1907. [6739]

Chairman.

Petition of the Westfield Central Labor Union relative to fares upon the Western Massachusetts street railway.

The Western Massachusetts railway as now operated in the town of Westfield is composed of both through and branch lines. The petitioners virtually ask for a five-cent fare throughout the town, a ride on some lines of about ten miles. In view of the character of the traffic, we do not believe that the company can afford to establish, either through a fare or transfer, as low a rate as that desired.

Examination discloses that, as a consequence of this service having been formerly over the railways of two separate corporations, a charge of fifteen cents is in some instances made for transportation within the limits of the town. This we think excessive, and suggest that fares on the railway in Westfield be so rearranged that not more than ten cents shall be charged for one ride between points within the town; and that the charge be even less in connection with the branch lines to and from the town centre, leaving to the company the problem of working out the details of the arrangement in conformity with the spirit of these recommendations.

For the Board,

CHARLES E. MANN,

DECEMBER 4, 1907. [6760]

Clerk.

Complaint of Industrial Committee of Weymouth concerning conditions upon the Old Colony street railway.

G. L. BARNES for complaint.

R. S. GOFF for company.

The complainants call attention to the tracks of the Old Colony street railway in Pleasant street in the town of Weymouth and

claim that they should be reconstructed. This complaint is clearly sustained by the conditions which are proved to exist, and the company is advised that measures ought to be taken to reconstruct these tracks as soon as the weather will permit.

The committee also presents the complaint of certain patrons with reference to the overcrowding of cars. While the company cannot fairly be asked to provide seats for all passengers who ride for a distance covered by the payment of a single five-cent fare, it can fairly be required to provide proper standing room for passengers who fail to secure seats. It is expected that this rule will be enforced, and that if under it a larger car or an additional car is necessary, such car will be furnished.

For the Board,

JAMES F. JACKSON,

JANUARY 25, 1907.

[6424]

Chairman.

BOSTON AND ALBANY RAILROAD.

REPORTS ON FINDINGS AND RECOMMENDATIONS OF
THE BOARD.

HON. JAMES F. JACKSON, *Chairman, Board of Railroad Commissioners,
Boston, Mass.*

DEAR SIR:—Replying to your favor of September 26, 1907, addressed to Vice-President Van Etten, in which you recite the former findings and recommendations of your Board, and in which you request specific data to show what steps have been taken to comply therewith, I beg to reply as follows:—

I. EQUIPMENT.

(1) *Locomotives.*

The following statement shows briefly but substantially the situation with reference to the number and class of locomotives in use upon the Boston & Albany Railroad at the time of the lease by the New York Central & Hudson River Railroad Company, and at the present time, together with the additional equipment now under contract:—

Exhibit "A."

CLASS.		NUMBER OF ENGINES.			
		Lease inventory 1899.	Condition October, 1907.	Additional Engines loaned to Boston & Albany by New York Central pending Delivery of New Engines ordered.	New Engines under Contract for the Boston & Albany Railroad.
Passenger,	{ Light,	81	67	—	—
	{ Heavy,	2	42	4	18
Freight,	{ Light,	118	96	3	—
	{ Heavy,	5	72	42	25
Switch,	{ Light,	36	31	2	—
	{ Heavy,	3	9	—	—
Total,		245	317	51	43

The following statement shows substantially the number and high class of locomotives which have been delivered to the Boston & Albany Railroad during the past two years:—

Exhibit "B."

NUMBER OF LOCOMOTIVES	Class.	Type.	Date delivered.	Approximate Cost.
10,	G-5g, .	Consol., .	Oct. 1905, .	\$170,000 00
6,	K-A, .	Pacific, .	Oct. 1905, .	106,500 00
10,	L-1, .	Suburban, .	Feb. 1906, .	147,000 00
10,	F-2c, .	10-wheel, .	Apr. 1907, .	169,100 00
2,	K-c, .	Pacific, .	June 1907, .	38,600 00
10,	G-5w, .	Consol., .	June 1907, .	183,090 00
5,	G-5w, .	Consol., .	June 1907, .	91,545 00
9 B-10c, . .	B-10i, .	6-wheel, .	Aug. 1907, .	125,819 00
62				\$1,031,654 00

The following statement shows substantially the high class and cost of locomotives now under contract:—

Exhibit "C."

NUMBER OF LOCOMOTIVES.	Class.	Type.	Contract Date of Delivery.	Cost.
15,	G-6, .	Consol., .	From Nov.,	\$280,800 00
10,	F-2-F, .	10-wheel, .	1907 to	180,100 00
8,	L-1-A, .	Suburban, .	January,	128,280 00
10,	K-D, .	Pacific, .	1908.	196,750 00
43				\$785,930 00

By referring to Exhibit "A" it will be observed that the number of modern engines now regularly assigned to the Boston & Albany Railroad has been increased essentially 50 per cent.

Fortunately, the New York Central had, for a number of years, anticipated its expansion in business and the consequent need of modern motive power, and was in a position to loan to the Boston & Albany Railroad a considerable number of modern engines, pending the purchase of new power for that road, and if to the engines now owned and assigned to the Boston & Albany we add the engines which have been loaned to the Boston & Albany railroad by the New York Central, pending the purchase of new locomotives, the increase is essentially 70 per cent.

It will also be observed that the new power which has been regularly assigned to the Boston and Albany, together with that which has been loaned by the New York Central, is in general the highest class of locomotives now in regular service on any railroad in the United States.

If the locomotives be considered with reference to their horsepower or draw-bar pull, instead of with reference to their number, the aggregate improvement, including power loaded, would be substantially 100 per cent.

The locomotives under contract, as shown by Exhibit "C," consist of 15 of the largest type of consolidation freight engines; 10 heavy 10-wheel engines for combination service on fast freights and in emergency on heavy passenger trains,—having been designed both with regard to speed and draw-bar pull for the difficult grade conditions on the Boston & Albany road; 8 new engines for suburban service; 10 of the largest type of Pacific engines, for the heavy through passenger trains.

As you are aware, the installation of these modern heavy locomotives introduces during the transition period many other abnormal expenses, as well as many unavoidable complications in handling and repairing the locomotives and securing the efficiency which should result upon the complete installation.

As you are well aware, the engine houses, repair shops, and their machinery and appurtenances on the Boston & Albany road, while they were originally built in a most substantial manner, were for the handling of engines of small size, and at the time of the lease practically all of them were quite old and more or less obsolete, and will require a general replacement throughout, at a cost approaching \$1,000,000, which work is in progress and will be referred to later under details of expenditures ordered and contemplated. Work of such magnitude, both from an engineering and financial standpoint,—especially when considered in conjunction with num-

erous other constructions which are equally imperative, — naturally requires considerable time for its planning and execution; but it is the intention of the company to pursue this work vigorously until it is completed. In the mean time, the dismantling of the old shops while substituting the new — often upon the same site, such as we are now doing at Springfield — makes it difficult or almost impossible to keep the power in that state of good condition which good service and intelligent economy requires, and some vexatious delays or locomotive failures are unavoidable.

(2) *Passenger Equipment.*

In reference to the character and number of cars constituting the Boston & Albany passenger equipment at the time of the lease your Honorable Board is well informed, from personal knowledge and from the inventory taken at that time. It consisted substantially of the following: —

Exhibit "D."

Passenger cars, etc.,	304
Baggage, mail and express,	65
Buffet (jointly owned),	4
<hr/>	
Total,	373

The passenger equipment on the Boston & Albany Railroad as of October 30, 1907, was substantially as follows: —

Exhibit "E."

TYPE.	Number.
Coach,	247
Smoking,	32
Passenger and baggage (combined),	41
Passenger, baggage and mail (combined),	6
Mail,	23
Mail and baggage (combined),	2
Baggage and express,	62
Milk,	10
Buffet,	1
Dining,	3
Electric baggage and mail (combined),	1
<hr/>	
Total,	428

The passenger equipment which has been assigned to the Boston & Albany railroad during the lease (including Exhibit "E"), with its cost, is substantially as follows:—

Exhibit "F."

NUMBER OF CARS.	Assigned.	Class.	Cost.
4,	1902, . . .	Baggage,	\$16,483 28
25,	1903, . . .	Coaches,	180,591 25
2,	1903, . . .	Mail,	11,193 84
4,	1903, 1904, . . .	Baggage,	21,584 40
6,	1904, . . .	Mail,	34,631 80
3,	1905, . . .	Baggage,	13,727 58
6,	1905, 1906, . . .	Mail,	33,581 52
5,	1906, . . .	Baggage,	22,500 00
10,	1906, . . .	Coaches,	81,341 53
50,	1907, . . .	Coaches,	270,483 08
2,	1907, . . .	Café coaches,	30,774 00
117,			\$715,892 28

The foregoing constitutes a very material improvement both in the number of cars and in the class of equipment.

(3) Other Equipment. — Exhibit "G."

There has also been added from time to time, since 1900, other miscellaneous equipment for the improvement of the service, the principal items of which are as follows:—

	Cost.
100 modern ballast cars,	\$92,900 00
600 box cars,	505,000 00
60 caboose cars,	30,000 00
1 100-ton steam crane,	13,900 00
1 coaling crane,	6,630 00

And some other miscellaneous equipment.

Total,	\$648,430 00
------------------	--------------

Exhibit "H."

An order has been placed for 40 additional caboose cars, at a

cost of	\$35,000 00
-------------------	-------------

Grand total, equipment,	\$3,216,906 28
-----------------------------------	----------------

II. STRUCTURES.

The following shows the important structures which have been authorized and the expenditures made thereon as of October 1, 1907:—

Exhibit "I."

	Authorized.	Expended.
<i>Engine Facilities.</i>		
West Springfield, new locomotive erecting shop, with appurtenances,	\$350,000 00	\$55,000 00
North Adams Junction, new engine house,	40,000 00	104 50
Beacon Park, new engine house,	100,000 00	1,600 00
Total authorized for improving locomotive facilities,	\$490,000 00	\$56,704 50
<i>Coaling Plants.</i>		
Charlton,	\$7,500 00	—
West Springfield,	7,300 00	—
Riverside,	10,000 00	—
Total,	\$24,800 00	—
<i>Passenger Stations.</i>		
Milford,	\$12,000 00	—
Richmond,	5,000 00	—
Total,	\$17,000 00	—
<i>Water Stations.</i>		
Brookview,	\$4,810 00	—
Chatham,	4,800 00	—
Rochdale,	4,500 00	—
Chester,	4,500 00	—
Total,	\$18,610 00	—
Improvement to grain elevator, East Boston,	75,000 00	15,333 85
Grand total, structures,	\$625,410 00	\$56,704 50

To which should be added the East Boston and other special improvements which have been concluded in former reports.

As much of the foregoing work is being executed by contracts, where full payments are not to be made until the completion of the work, the amount shown as expended does not accurately represent the progress of the work, and the following statement is submitted as further explanation:—

In reference to the engine-erecting shop at *West Springfield*: The original appropriation heretofore reported to your Honorable

Board was \$250,000, to which an additional appropriation of \$100,000 has been added. The work is under contract and is progressing favorably, and it is expected that a portion of the improvements will be available for service during the present winter, and that the work will be completed during the following summer. There has been some delay, through the slow delivery of steel and other material for the work. The accompanying photograph, marked "I," illustrates the present condition of this improvement.

The completion of this modern locomotive-erecting shop will furnish adequate and long-needed facilities for heavy repairs to locomotives on the Boston & Albany Railroad.

The engine house at *North Adams Junction* has been placed under contract. The excavations were commenced early in October. A strong effort is being made to have the improvement ready for service during December. This house, when completed, will afford adequate facilities for properly caring for motive power at this point, and the dismantling of the old engine house at Pittsfield immediately thereafter will afford an area for team track delivery at Pittsfield which has long been needed, and for which an appropriation will be made in due course.

The appropriation of \$50,000, heretofore reported for the erection of a modern engine house at *Beacon Park*, has, upon further consideration, been increased to \$100,000, in order to provide a much larger engine house than heretofore contemplated, to provide for future expansion of business and other contingencies, and to equip it with more modern and costly appliances.

The plans have been completed and the contract awarded, and the work upon the foundations commenced. The work will be prosecuted so long as the weather permits, and will be completed as early as possible in the spring.

The erection of a coaling plant at *Charlton* has been deferred for the immediate present, pending the preparation of plans and the ordering of further improvements in the way of third tracks and passing tracks, which will have an important bearing upon the proper location of the plant. The improvements for which plans are now being prepared will locate the plant at the foot of the grade between South Spencer and Brookfield, instead of at the summit of Charlton grade, which location was upon a further examination deemed inadvisable.

Work upon the temporary or emergency coaling plant at *West Springfield* is in progress, and the plant will be ready for use in December.

The work upon the *Riverside* coaling plant is progressing. A Brown coal hoisting crane, at a cost of \$6,630, has been purchased, and the work is now being done upon the tracks and ash-pits, with a view of having the entire layout ready in December.

Bids for the building of the new station at *Milford* have been opened; at the same time protests were presented by the interests at Milford regarding the proposed location of the building, which will be given careful consideration, and the work will proceed promptly as soon as a conclusion may be reached which will conserve the best interests of the public and the road.

Bids have been received for the new building at *Richmond*, and contracts will be awarded. In view of the fact, however, that the present building must be removed to a temporary location and used while the new structure is being erected, it will not be advisable to occupy this temporary structure during the winter season, and the work will be completed in the spring.

It is expected that the work upon the *East Boston* grain elevator will be completed by January 1.

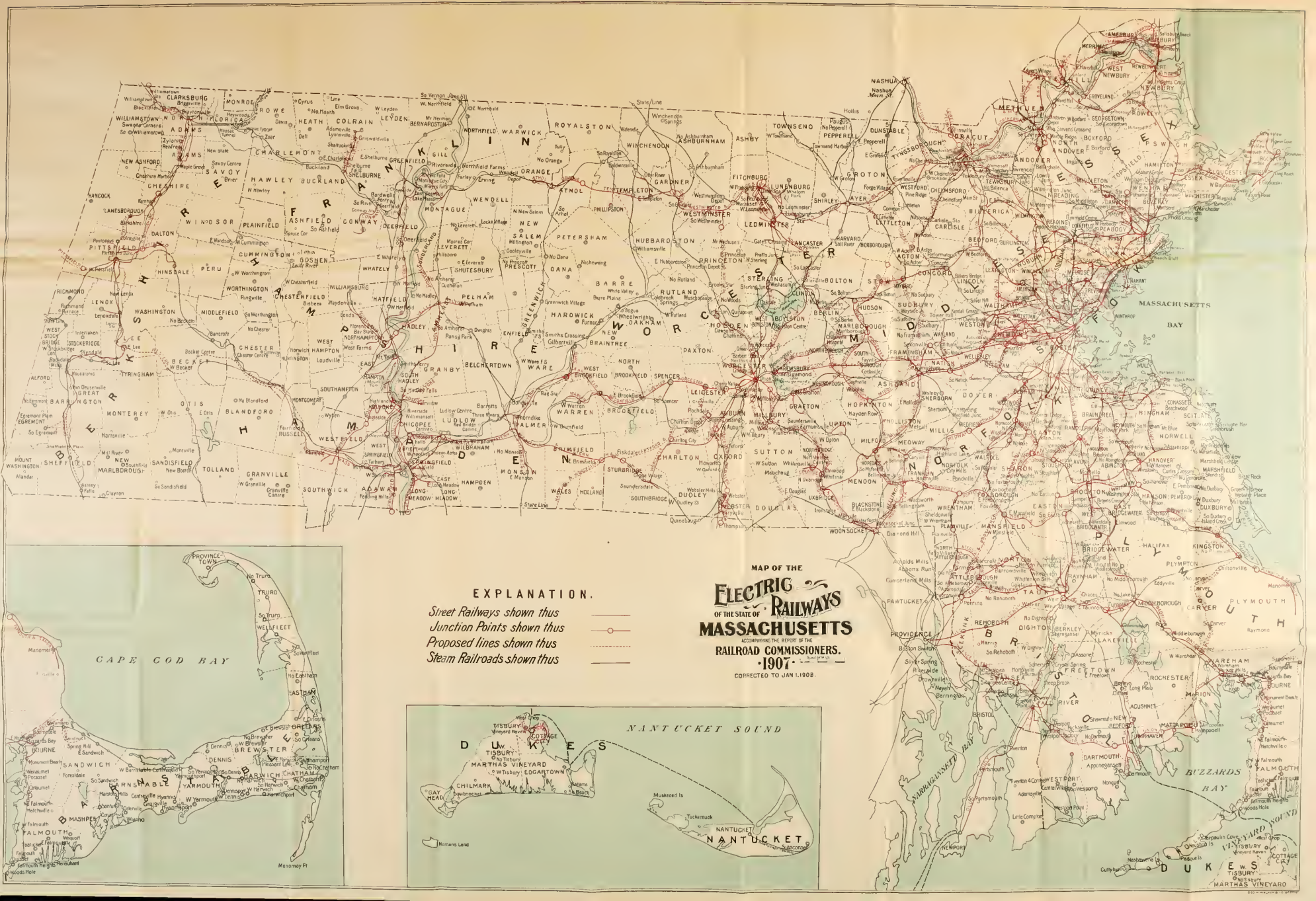
Water Stations.

All of the material for the water stations referred to has been ordered, and some of it received. The work will proceed as fast as material is obtained, with the intention of completing some of the stations this winter and the balance in the spring.

III. BLOCK SIGNALS.

	Authorized.	Expended.
Improved type of automatic signals,	\$50,000 00	\$50,000 00
New interlocking plant at Natick, and new signals between South Framingham and Lake Crossing,	30,000 00	—
Totals,	\$80,000 00	\$50,000 00

This improved type of automatic signals is now in operation between South Framingham and Worcester, and between Charlton and Palmer will go into operation in November. Those between Wellesley and South Framingham will go into operation prior to January 1. Those between South Framingham and Lake Crossing will be placed in operation in conjunction with the new four-tracking between now and January 1.



EXPLANATION.

Street Railways shown thus
Junction Points shown thus
Proposed lines shown thus
Steam Railroads shown thus



MAP OF THE ELECTRIC RAILWAYS OF THE STATE OF MASSACHUSETTS RAILROAD COMMISSIONERS. 1907.

CORRECTED TO JAN 1908



The work upon the *Riverside* coaling plant is progressing. A Brown coal hoisting crane, at a cost of \$6,630, has been purchased, and the work is now being done upon the tracks and ash-pits, with a view of having the entire layout ready in December.

Bids for the building of the new station at *Milford* have been opened; at the same time protests were presented by the interests at *Milford* regarding the proposed location of the building, which will be given careful consideration, and the work will proceed promptly as soon as a conclusion may be reached which will conserve the best interests of the public and the road.

Bids have been received for the new building at *Richmond*, and contracts will be awarded. In view of the fact, however, that the present building must be removed to a temporary location and used while the new structure is being erected, it will not be advisable to occupy this temporary structure during the winter season, and the work will be completed in the spring.

It is expected that the work upon the *East Boston* grain elevator will be completed by January 1.

Water Stations.

All of the material for the water stations referred to has been ordered, and some of it received. The work will proceed as fast as material is obtained, with the intention of completing some of the stations this winter and the balance in the spring.

III. BLOCK SIGNALS.

	Authorized.	Expended.
Improved type of automatic signals,	\$50,000 00	\$50,000 00
New interlocking plant at Natick, and new signals between South Framingham and Lake Crossing,	30,000 00	—
Totals,	\$80,000 00	\$50,000 00

This improved type of automatic signals is now in operation between South Framingham and Worcester, and between Charlton and Palmer will go into operation in November. Those between Wellesley and South Framingham will go into operation prior to January 1. Those between South Framingham and Lake Crossing will be placed in operation in conjunction with the new four-tracking between now and January 1.

IV. TRACK AND YARD IMPROVEMENT.

The following statement shows the appropriations made and amounts expended for yard improvements, for new third and fourth tracking, and for passing track improvements:—

Exhibit "J."

	Authorized.	Expended.
Enlarging Springfield freight yard,	\$86,000 00	\$51,501 85
Third and fourth tracks, Lake Crossing to South Framingham,	163,000 00	65,343 67
<i>Third Tracks.</i>		
Charlton to South Spencer,	80,000 00	51,983 09
Richmond Summit to Richmond,	45,000 00	569 90
Richmond to State Line,	60,000 00	2,994 14
State Line to Canaan,	45,000 00	1,627 65
Canaan to East Chatham,	62,500 00	22,730 17
Van Hoesen to Brookview,	77,000 00	12,683 23
Brookview to East Greenbush,	38,000 00	25,429 66
Grand View to Rensselaer,	35,000 00	10,863 55
Pittsfield (North Adams Junction) to Dalton,	65,000 00	8,672 55
<i>Sidings.</i>		
Passing siding, West Brimfield,	1,500 00	—
Passing siding, Huntington,	6,500 00	—
Passing siding, Middlefield,	16,000 00	3,194 73
Passing siding, extension, Chester,	2,700 00	—
Passing siding, between Worcester and Charlton,	25,000 00	—
Siding, South Framingham yard,	7,207 80	7,207 80
Siding, Chatham,	11,500 00	—
Total,	\$826,907 80	\$264,801 99
<i>Grand Junction Branch.</i>		
Rail renewals,	75,000 00	—
Grand total, tracks,	\$901,907 80	\$264,801 99

The third and fourth track construction referred to above is illustrated on the straight-line diagram and profile appended hereto, and marked Exhibit J-1 (also, certain photographs attached hereto).

On account of a large amount of this work being executed by contract, upon which full payments are not made until the completion of the work, the amounts shown as expended do not represent fully the relative percentage of the improvements which have been completed, and in order to furnish further information in this connection the following general statement is submitted:—

Briefly, there is employed upon the foregoing track work 7 steam shovels, 21 locomotives and 1,500 men, embracing both company and contract forces, which is practically the maximum equipment and force that can be employed without radical interruption to traffic.

The necessary surveys having been completed and the larger portion of the additional right of way having been acquired, the equipment and forces employed have been very materially increased during October, with a view of completing as much of the improvement as possible before winter.

The situation in detail on the foregoing undertakings is essentially as follows:—

The enlargement of *Springfield* team yard is progressing as rapidly as possible, considering the difficulties in disposing of the material, which has to be handled through a congested passenger and freight terminal at that point. It is expected that room will be provided for the placing of 35 additional cars for team delivery during the month of November.

On the third and fourth tracking between *Lake Crossing* and *South Framingham* during the month of October 125 additional men have been assigned to the work, together with a steam shovel and other equipment, and with favorable weather conditions it is expected that the work will be completed this season.

On the third track between *Charlton* and *South Spencer* 50 additional men have been assigned to the work during October, and it is expected that the track will be placed in service during November.

On the third track between *Richmond Summit* and *State Line* 150 men have been added during October, a steam shovel working night and day, together with other equipment, and it is expected that the track will be placed in service during December.

State Line to Canaan: during October, 40 men, with steam shovel and other equipment, have been added, and it is expected that the track will be in service by December 1.

Canaan to East Chatham: since October 1, two-thirds of this track has been completed, and is in service. The grading upon the balance is completed, and it is expected that the track will be placed in service during November.

Van Hoesen to Brookview: since October 1, 130 men have been added to this work, and the grading and track work will be practically completed during November. However, on account of having

to construct a large masonry arch with pile foundations, the full benefit of the improvement may not be realized until spring.

Brookview to East Greenbush: since October 1, 75 men have been added to this work. Some difficulty and delay is resulting from bad sliding banks, due to clay formation. If this difficulty is overcome, it is expected that the work will be completed about the middle of December.

East Greenbush to Rensselaer: about one mile of this work is completed and in use. The property has just been acquired for the balance, but the work is of such magnitude, and is so located with reference to the Albany grade, and as it requires the use of the main tracks for filling, it is deemed advisable to defer the work until spring, by which time much of the foregoing improvements will have been completed, and will afford some relief to traffic while this work is being undertaken.

Pittsfield (North Adams Junction) to Dalton: third tracking contract, from Pittsfield to Dalton, has been let, and rapid progress is being made, and it is expected that the work will be completed during the winter.

With reference to the *passing sidings*: —

The one at *South Framingham* has been completed.

The one at *Chatham* is under contract for completion this year.

Huntington is progressing with company forces, with the expectation that it will be completed during December.

The one between *Worcester* and *Charlton* has been delayed, due to the necessity of having to acquire land by condemnation proceedings.

The others will be undertaken as soon as the forces may be released from some of the foregoing and more important work, upon which all forces available are being concentrated.

Grand Junction Branch: this important branch, serving the entire water front of the Boston & Albany railroad, together with many important industries, has for many years been maintained with light and old rail, with the exception of some minor replacements which have recently been made.

In order to place the track in condition commensurate with the important interests which the branch serves, the work of relaying the branch throughout, together with its important drilling leads, with heavy rail, has been ordered. The consignment will be given preference by the mills, and delivery is expected early in November.

V. FUEL.

Thirty-seven thousand tons of bituminous coal have been obtained in excess of immediate requirements, and have been stored at Boston, Worcester, Springfield and North Adams Junction, to meet emergencies which may arise during the winter.

VI. PARK SQUARE STATION MATTER.

There has been no abatement in the interest taken to find a solution of the passenger terminal problem in Boston, but the further study and investigation of the matter tend to create grave doubt as to the wisdom of abandoning in such a short time, without abundant reasons, the commodious South Station, which was provided at great cost and after long and comprehensive studies by the best experts obtainable; especially when all of the facilities originally contemplated and partially provided have not yet been fully utilized.

This step, when taken, of course, means the severance of union passenger facilities for the convenient transfer of passengers, and the discommoding to some extent of certain commercial relations which the station has created, irrespective of the consideration of the great expense involved.

If a serious error was committed in the building of this terminal for the special purpose for which it is now being used, which conclusion we yet hesitate to accept, it affords a monumental illustration of the necessity of not proceeding further in the matter until all of its aspects have been thoroughly reviewed.

During the period of densest traffic the South Terminal station is now handling about 88 trains per hour, or approximately one train per track in the station every twenty minutes. During the rush hours of the holiday season it has handled 97 trains per hour, or approximately $3\frac{1}{2}$ trains per track per hour, which is equivalent to a train per track every seventeen minutes.

Considering the time required to load baggage, mail and express, this compares favorably with the efficiency of any passenger terminal in the world.

The plans which have thus far been evolved on the Park Square site to handle the present train service of the Boston & Albany railroad would require the handling of 4 trains per track per hour to meet regular schedules, or the equivalent of a train per track per fifteen minutes, which is a denser performance, requiring greater efficiency, than the service now given at the South Terminal station.

Further consideration will be given to the plans, with the view of ascertaining what additional facilities might be provided.

Meanwhile, it should be borne in mind that the business now handled at the South Terminal station, aggregating approximately 850 trains per day, includes about 50 per cent. of suburban trains, for the major portion of which electric operation was anticipated and double-track subways provided, with an estimated capacity of 10,000 passengers per hour in each direction.

If this subway operation of the suburban service may be realized in the future, it will permit a corresponding increase in the through train service on the main track level.

This involves the finding of a system of electric traction which will be entirely reliable at all times under the peculiar tidal and climatic conditions which prevail in that section, and for which there is now no precedent as a guide. It is hoped that the electric installations now being made in New York City on a large scale, and with different types of construction, may lead to a satisfactory solution of the problem, to which end diligent effort will be employed; and we beg to solicit the patience of your Honorable Board and of the public, consistent with the magnitude of the matter involved.

VII. PASSENGER TRAIN SERVICE.

In order to improve the passenger service, additional equipment, both of locomotives and passenger cars, has been delivered and ordered to the Boston & Albany railroad, as illustrated in the foregoing exhibits.

The additional train service has also been inaugurated, as follows:—

Effective October 19, an arrangement was made whereby, when train No. 18, Southwestern Limited, was late, and not expected to pass Springfield before 6.30 P.M. (30 minutes late), Palmer local, due to leave Springfield at 5.50 P.M., would be held until 6.03 P.M., and run through to Boston, to accommodate passengers from Springfield, Palmer, Worcester and South Framingham.

Effective October 27, an additional mail train, leaving Boston at 6.30 P.M., has been provided, with a less number of cars than formerly, with a view of insuring connections at Albany with New York & Chicago mail train No. 35. The express formerly handled on this train will be handled by an independent train, leaving Boston at 6.45 P.M.

There has also been provided a new express train between Boston and Worcester, to relieve passenger trains Nos. 97 and 105, and

other local trains, of delays incident to the loading and unloading of express matter.

Train No. 13, leaving Boston at 1.45 P.M., is to run through to Buffalo intact, so as to avoid switching at Albany.

A new train is to leave Albany in connection with the Chicago & New York train No. 34, to handle mail and express exclusively; this being the return train of the fast mail from Boston, due to arrive at Boston at 5.15 A.M.

Train No. 46, Southwestern Express, and train No. 10, Chicago Special, will both be made up solid at Buffalo for Boston, so as to avoid switching and delay at Albany.

Some criticism has resulted from the starting of train No. 18, due to leave Albany at 2.55 P.M., without waiting for the southwestern connection when late. This train is made up of cars from Buffalo and New York, train No. 58, due to arrive at Albany at 2.05 P.M., and train No. 22, Chicago Limited, due to arrive at 2.15 P.M., and also handles a number of local passengers originating at Albany. An arrangement has been made by which this train will be held twenty minutes for the southwestern connection, if by holding the train for that length of time connection can be made; otherwise, it will be started on time. This will require the passengers from southwestern points to use train No. 14, due to leave Albany at 5.10 P.M., and to arrive at Boston at 11.55 P.M. It is believed that this arrangement will afford better accommodation for the larger number of patrons.

There is appended hereto, as requested, a statement of delays to passenger trains of more than ten minutes for the three weeks ending with the nineteenth day of October.

This service has been as unsatisfactory to the railroad company as it has at times been exasperating to the public; and, while we do not wish to submit excuses for it, we feel that we may be permitted to offer an explanation of certain events and conditions which were practically beyond control, but which aided materially in disturbing the service.

While a large number of new passenger engines has been added to the service, and others are under construction, we have not yet obtained a sufficient amount of modern power to protect the schedules of all the numerous heavy passenger trains now being operated, and the necessary reconstruction of the engine shops has made it impossible to give at all times that thorough attention to such equipment which a completion of the shops will insure.

Again, during this period a large number of men and from 15 to 20 work trains have been constantly employed, adjacent to tracks

under operation, upon the construction of additional main tracks, for the purpose of getting the tracks completed and in service before the more trying conditions of winter weather.

To relieve this situation as much as possible, additional trains of lighter weight have been added to the service, as heretofore stated.

The following series of freight accidents — most of them unavoidable — also contributed during this period to a material disturbance of the passenger service: —

October 2, at *Becket*: two freight trains fouled at a siding, making it necessary to use single track between Middlefield and Becket, with consequent delay to traffic.

October 8, near *Mittineague*: a journal broke under a New York, Ontario & Western freight car, blocking the east-bound track, and resulting in congestion of trains.

October 8, at *Middlefield*: a wheel broke under a H. B. T. car, resulting in derailment of nine cars, and blocking of both tracks for seven hours. Wrecking equipment from both Pittsfield and Springfield was at once employed, but, on account of the character of the wreck, great difficulty was experienced in clearing the track.

October 10, west of *Middlefield*: a draw bar broke on a Canadian Pacific car, resulting in a serious delay to several passenger trains.

October 10, at *Palmer*: a brake beam broke on a A. L. S. T. Co. car, and by falling upon the track caused a derailment, which resulted in detention to traffic of about three hours.

October 10, at *Oak Street*: a brake beam broke on a New York Central car, causing a derailment and a blocking of the track for four hours.

October 12, at *State Line*: draw bar pulled out of a D. & H. car, causing a derailment and blocking track for an hour and thirty minutes.

October 12, at *Lake Crossing*: a light collision between two freight trains resulted in the blocking of one track for about an hour, and requiring the use of single track meanwhile.

October 13, at *Russell*: Lehigh Valley car was derailed while passing through a switch, from causes unknown, but assumed to be rigid truck, resulting in a detention of about two hours.

October 14, at *Charlton*: the sudden application of air brakes caused the derailment of a caboose to which a pusher engine was attached, resulting in an obstruction of the traffic for about one hour.

October 14, near *Middlefield*: a loose wheel on a Pennsylvania Railroad car resulted in a derailment and the tearing up of the

track for a considerable distance, and an interruption of traffic for five hours.

October 15, at *Riverside*: flange broke on a New York Central car, resulting in the derailment of two other cars, and blocking tracks 2 and 3, causing serious detention to passenger and freight trains in and out of Boston.

October 15, at *Hinsdale*: a freight car was derailed, from causes not yet assigned, resulting in the blocking of one track for about five hours.

October 16, at *East Chatham*: a car in the construction service was derailed, obstructing one track for about an hour.

October 18, at *Mittineague*: a construction car was derailed on a switch, necessitating use of single track for about four hours.

October 19, at *State Line*: freight trains fouling at a switch caused derailment of four cars, necessitating use of single track for five hours.

In reference to the failure of this equipment, both home and foreign, it may be said that the equipment was subjected to the most careful inspection before being admitted upon the road, but the defects in metal were such in practically every case that no inspection could discover the defect.

With reference to the freight trains fouling at switches:—

The remedy lies in proper discipline, which will be administered, and primarily in the providing of modern interlocking plants at important points,—which the Boston & Albany Railroad has not heretofore extensively installed.

VIII. IMPROVEMENT IN FREIGHT SERVICE.

With reference to export trade: the improvements which are now in progress at East Boston, including the elimination of grade crossings, with yard enlargements, and the installation of the new freight pier, which is approaching completion; the rebuilding of pier No. 6, which will be undertaken during the ensuing year; together with the recent authorization of \$75,000 for improving the track conditions on the Grand Junction Branch,—will provide abundant facilities in proper condition for this important traffic in maintaining the prestige of the Boston port.

The additional third tracks which are being built for exclusive freight service through the Berkshire Hills will materially increase the capacity of the Boston & Albany Railroad and expedite the handling of freight, and give passenger trains free and independent movement.

The modern locomotives which have been supplied, together with

those which are ordered and under consideration for the ensuing year, will again add materially to the capacity and efficiency of the line, as soon as the third tracks, engine shops and round-houses have been completed, to permit the use of the power to its full capacity.

These improvements, and others now being evolved, — which will be summarized hereafter, and more completely presented in a supplemental report, — will provide abundant means on behalf of the railroad for the prompt handling of freight in transit.

The most serious question, however, with which we are now confronted, and which, if not properly disposed of, will tend to vitiate all of these improvements and make the prompt delivery of freight to the consignee — which is of first importance — almost impossible, — I refer especially to the slow delivery of freight in congested centers.

When industrial development was less active, when railroads had equipment, freight stations and team yards in excess of their immediate needs, and when such facilities could be placed at the disposal of patrons without much additional expense or inconvenience, there was inaugurated a system of free storage and unlimited time of delivery of freight, which, under modern conditions of development and density of traffic, not only subjects the railroads to great expense in the congestion of terminals, storage yards and sidings, but also becomes a great expense and inconvenience to the public in general, who are conducting an active business, for the accommodation of a few.

In large cities, such as Boston, Springfield, Worcester, etc., freight stations have heretofore been provided in districts which are now surrounded with costly and important mercantile and manufacturing institutions, preventing further expansion except at abnormal and almost prohibitive expense. In many cases, by the elimination of this traffic tolerance, — which is now practically a traffic abuse, — which, doubtless, the railroads have been loath to undertake, on account of a possible misconstruction, with adverse public sentiment and loss of business, the facilities would be more than abundant for the prompt handling of all business presented. For instance, in Boston and in many other cities it has been the practice of permitting six days free storage in warehouses, and four days free storage in cars, which would appear to be more than reasonable service, under the exacting trade conditions of the present time, and must eventually work a hardship rather than a benefit upon the community, as well as upon the railroad, where the practice is continued.

In this connection we beg to submit the following statistics, showing the relative detention by railroads and consignees in several important commercial centers of the United States for the quarter ending June 30, 1907:—

Exhibit "K."

TERRITORY, BY CAR ASSOCIATIONS.	AVERAGE DETENTION OF CARS (DAYS).		
	By Railroad.	By Consignees.	Total.
Central New York, . . . . .	.54	1.72	2.26
Western New York, . . . . .	.42	1.69	2.11
New York & New Jersey, . . . . .	.60	1.84	2.24
Chicago, . . . . .	.58	1.51	2.09
Philadelphia, . . . . .	.15	1.29	1.44
New England, . . . . .	.35	2.18	2.53
Average United States & Canada, . . . . .	.42	1.51	1.93
City of Boston (Boston & Albany) (Kneeland Street, Boston), . . . . .	.40	4.00	4.40

This statement, which is compiled from accurate statistics, shows that the average detention by railroads in the New England States is less than the average detention for the United States and Canada. The detention by the consignee is greater than the average and greater than in any other territory in the United States and Canada, and likewise the total detention is greater.

Considering Boston as an illustration, which condition also prevails at several other large cities, the average detention by consignees, after the cars are placed upon the delivery tracks, is essentially four days.

During the months of June, July and August, — the season most favorable for the teaming of freight, — there were constantly placed in the Kneeland Street yards in Boston 150 cars upon the team tracks awaiting delivery. The actual delivery was 37 cars per day, instead of about 70 cars, which reasonable regulations would require.

Meanwhile, on account of this slow acceptance of freight by consignee, there were detained in the storage yards adjacent to Boston, awaiting placement upon the team delivery tracks, an average of about 250 cars per day for a period of eight days. The enforcement of a reasonable regulation would have eliminated the congestion within a period of three or four days, and furnished abundant facilities for a much larger volume of business.

Similar conditions prevail at some of the inbound freight houses.

For the best interests of the large number of important com-

mercial institutions, as well as for the interest of the railroad in performing its important duty to the public, we feel that serious consideration in that territory should be given to this matter, in order that it may be fully and correctly appreciated by the public, and in order that different regulations may be instituted, whereby a 48-hour delivery — which is now an established practice elsewhere — will there also be observed.

In the city of New York, and elsewhere, regulations have been adopted substantially as illustrated by Exhibit "L," appended hereto, which provides for a progressive trackage charge in addition to car service charges, for detention of equipment and the use of lands beyond forty-eight hours. Such an arrangement practically doubles the capacity of rolling stock, removes yard congestion, and greatly improves the service in every respect, without working a hardship on any one except a few who choose to use railroad equipment as the cheapest means of storage.

For a correct understanding and proper solution of this problem, we beg to solicit the earnest consideration and co-operation of your Honorable Board and the public.

The industrial prestige of Massachusetts, augmented as it has been during the past five years by an increase in manufactured products ranging from 11 to 49 per cent., amply justifies the assertion that "the Boston & Albany railroad, as a great avenue of transportation, affording direct communication between the vast territory beyond our State lines and a chain of the most flourishing cities of New England, ending with the second port of the country, offers a splendid field for railroad enterprise."

In order that there may be an exchange of opinions with your Honorable Board and a complete understanding as to the policy which will be pursued in this enterprise, we beg to submit for consideration a brief program, which has been formulated for execution as fast as conditions will permit, in order that the spirit of the arrangement and the true understanding between the parties may be reasonably fulfilled, and in order that it may, as suggested by your Honorable Board, be in fact a liberal and progressive management of the railroad: —

First. — Complete the replacement of obsolete motive power by modern equipment, in order to avoid delays which inadequate power entails, and to provide the high-class passenger service which the character of the travel on the Boston & Albany railroad demands.

Second. — The completion of the necessary shops, engine houses and appurtenances for the proper care of such equipment.

Third. — The construction of additional main tracks, especially upon the western slope of the Berkshire Hills, to facilitate the movement of freight traffic, and minimize the interference with passenger trains.

Fourth. — The building of passing tracks and station service tracks for similar purposes.

Fifth. — Replacing the existing form of automatic signals with signals of more improved type.

Sixth. — Providing modern interlocking at principal detouring points.

Seventh. — Enlarging the station and station track facilities, especially freight, where they are inadequate for the business.

Eighth. — Providing an assembling yard on the Boston & Albany railroad, by the enlargement of some existing yard or the construction of a new yard, whereby the cars for the Boston & Albany railroad delivery may be concentrated upon that line and promptly dispatched to delivering stations after such stations are ready to receive them, and for quick placing at piers for export.

Ninth. — The completion of the improvements heretofore announced for the East Boston Dock Terminal and the Grand Junction railroad, in order to secure the full benefit of that property for export business and to serve the industries tributary thereto.

Tenth. — The furnishing of such additional passenger equipment as may be required from time to time, in order that the standard and quality of the service may not be impaired, but may be improved where possible.

Eleventh. — A comprehensive study of the Boston Terminal situation, with a view of finding the proper solution.

Twelfth. — An organization composed of men who understand their duty, both to the company and the public, and who will diligently pursue it.

The above program must necessarily be deliberate, as well as progressive, both on account of the magnitude of the work contemplated and the expenditures involved. It has been undertaken in a liberal spirit, and will be pushed to as early completion as a proper regard for the safety and convenience of the public will permit. We beg to assure your Honorable Board that the management is endeavoring to fully grasp the situation, and will in good faith endeavor to meet it.

Respectfully submitted,

A. H. SMITH,

Vice-President and General Manager.

OCTOBER 31, 1907.

SUPPLEMENTAL REPORT.

To the Honorable the Board of Railroad Commissioners of the Commonwealth of Massachusetts.

Replying to your favor of December 10, addressed to Mr. J. H. Hustis, Assistant General Manager of the Boston & Albany railroad, in which you extend to us the opportunity of submitting additional data concerning the freight and passenger service on the Boston & Albany railroad, I beg to present the following information as a supplement to my report of October 31, 1907:—

I. Equipment.

Upon page 3 of my former report I gave a list (Exhibit "C") of 43 engines under contract for delivery between November, 1907, and January, 1908, the following of which have been received:—

NUMBER LOCOMOTIVES.	Class.	Type.	Date of Delivery.
5,	F-2-F, .	10-wheel, .	December 5.
2,	F-2-F, .	10-wheel, .	December 7.
3,	F-2-F, .	10-wheel, .	December 10.
2,	K-D, .	Pacific, .	December 14.
4,	K-D, .	Pacific, .	December 15.
3,	K-D, .	Pacific, .	December 17.
1,	K-D, .	Pacific, .	December 18.
2,	L-1-A, .	Suburban, .	December 14.
2,	L-1-A, .	Suburban, .	December 17.
2,	L-1-A, .	Suburban, .	December 18.
1,	G-6, .	Consol., .	December 19.
—			
27			

The remaining engines are under construction for early delivery.

The order for 40 additional caboose cars is now in substantially the following condition:—

Received to date, December 20,	26
Due for delivery, December 26,	2
Due for delivery, December 28,	2
Under construction at Allston shops for early delivery,	10
	<hr/> 40

A portion of the new erecting shop at West Springfield is now enclosed, and it is expected that by January 1, 1908, facilities will be ready for the repair at one time of 14 engines. The work of completing the shop will proceed promptly.

The work on the new engine house at North Adams Junction is progressing favorably, and, while we shall not be able to occupy the house during December, it will be completed at an early date thereafter.

The emergency coaling plant at West Springfield has been completed.

For the coaling plant at Riverside the hoisting crane is in position, the necessary tracks and pits have been provided, and the entire plant is approaching completion.

The East Boston grain elevator has been in constant use since my former report, and it is deemed advisable to defer the work for a short while, until the movement of grain diminishes, so that there will be no interruption to the large volume of traffic now moving.

The improved type of block signals referred to in my former report have been completed, and are now in operation between the following points: Charlton to Palmer; Wellesley and South Framingham; South Framingham and Lake Crossing.

Enlargement of Springfield freight yard: the plans provide for the accommodation of 65 additional team delivery cars. Tracks and driveways have been completed for 40 cars.

The third and fourth tracks from Lake Crossing to Natick were put in service on December 8, and between Natick and South Framingham on December 19.

The third track between Charlton and South Spencer was placed in operation on November 19.

The grading between Richmond Summit and Richmond is substantially 75 per cent. completed, and with a continuation of favorable weather it is expected that the grading will be completed this year.

Between Richmond and State Line the grading is completed and the track is laid and ballasted for about one-half the distance, and it is the intention to complete the remainder of it during December or early in January.

Between State Line and Canaan the work is practically completed, and that portion between the tunnel and State Line is in operation; and it is expected that the balance will be placed in service before January 1.

Between Canaan and East Chatham the third track was completed and put in operation on November 7.

Between Van Hoesen and Brookview the track is complete and in operation, with the exception of about 900 feet at Brookview,

which we expect to place in operation during January, as soon as the necessary filling has been completed over a large arch.

Between Brookview and East Greenbush the third track is in operation, with the exception of about 600 feet, where some difficulties are still experienced with sliding banks.

Between Grand View and Rensselaer about one mile of the third track is complete and in use.

Between Pittsfield (North Adams Junction) and Dalton the grading and track work are substantially completed, and it is expected that the third track will be placed in use about January 1. Since my former report an additional appropriation has been made for the extension of this third track from Dalton to Hinsdale.

Passing Sidings.

At Huntington it is expected that the passing siding will be completed during the current month.

At Middlefield it is expected that the grading will be completed this month, and the track laying as soon thereafter as the weather conditions will permit.

At Chester it is expected that the work will be completed during December.

The remaining passing sidings between Worcester and Charlton will be deferred until spring, it now being too late to undertake the grading; and all available forces have been applied to the more important work enumerated above.

Essentially two miles of new rail have been laid upon the Grand Junction Branch, and the laying of the remainder will proceed as the weather conditions permit.

Passenger Train Service.

During the first 13 days of October, 1907, being a portion of the period covered by the detailed report of passenger train service submitted with my report of October 31, the average delay to 369 through passenger trains was approximately 53 minutes per train. During the first 13 days of December, 1907, the average delay to the same number of through trains was approximately 30 minutes per train,—a reduction in the delays of about 23 minutes per train.

The delays during both periods were due largely to freight train derailments, and to some interference from the large amount of construction work being conducted.

During the same period in October the average delay to 7,854 suburban trains was 3.4 minutes, and during December 5.4 minutes per train, showing an increased detention per train of about 2 minutes. This delay to the suburban service was due largely to the tidal conditions between Trinity Place and the South Terminal, and also to more severe weather conditions during December than during October. Eight new engines for the circuit service are expected for use during the early part of January, together with the new coaling plant and engine facilities at Riverside.

Freight Service.

At the present time there is no accumulation of freight being held by any of the connections for delivery to the Boston & Albany railroad. All freight is being received as offered, and handled with promptness.

Neither is there any congestion in the large cities on the Boston & Albany, such as Boston, Worcester, Pittsfield, Springfield, etc.; and a diligent effort is being made to maintain the fast freight schedule for merchandise and other high-class commodities.

During the month of November, 1907, the export business handled at East Boston amounted to 48,370 tons, as compared with 24,658 tons during the same month last year, or an increase of substantially 100 per cent.

In the tonnage for 1907 there were included 24,546 tons of grain, as compared with 13,035 tons of grain for the corresponding month of 1906.

On December 16, 1907, there were in Boston substantially 1,000,000 bushels of grain, and 400,000 bushels en route.

Respectfully submitted,

A. H. SMITH,

Vice-President and General Manager.

ADDENDA.

To report dated December 21, 1907.

The entire of 43 locomotives have been received.

Thirty-six of the cabooses have been received.

Erecting Shop, West Springfield.

Forty per cent. of this work has been completed.

North Adams Junction Engine House.

Ninety per cent. has been completed.

Riverside Coaling Plant.

Ninety per cent. has been completed.

Signals.

Eighty per cent. has been completed, and is in use.

Third Track.

There has been completed and put in service since October 1, 37.18 miles of third and fourth track, and it is expected before January 1, 1908, additional 2.03 miles will be in service.

Grain Tonnage.

Grain tonnage passing through the East Boston elevator for the past four years, ending November 30, is as follows:—

	Tons.
1904,	46,131
1905,	202,271
1906,	231,901
1907,	278,206

Coal and Coke Tonnage.

Anthracite and bituminous coal and coke tonnage has increased as follows:—

	Net Tons.
Year ending December 31, 1905,	1,434,564
Year ending December 31, 1906,	1,474,606
Ten months ending October 31, 1907,	1,871,055

During 1906 there was a strike in the bituminous coal region from April to middle of July.

Figures for November and December, 1907, not yet available, but there has been a normal movement during these two months.

J. H. HUSTIS,

Assistant General Manager, Boston & Albany Railroad.

APPROVAL OF BLOCK SIGNALS.

Petition of the Boston and Albany Railroad Company for approval of the use of block signals.

After consideration, — it is

Ordered, That the approval of the Board be hereby given to the use upon the Boston and Albany railroad of mechanical signals as shown on Plate 1; Hall Automatic Electric Disc signal as shown on Plate 2 B; Union Automatic Electric Disc signal as shown on Plate 3; Union Electric Banner signal as shown on Plate 4; Hall Automatic Electro Gas signals as shown on Plate 5; and Union Automatic Electric Semaphore signals as shown on Plates 6 and 7; said plates accompanying and being described in the petition.

Attest: CHARLES E. MANN,
OCTOBER 1, 1907. [6459] Clerk.

Application of the Boston and Maine Railroad for approval of the use of automatic block signals.

After consideration, — it is

Ordered, That the approval of the Board be given to the use upon the Boston and Maine railroad of the automatic block signal device known as the Union Electric Semaphore signal.

Attest: CHARLES E. MANN,
JANUARY 16, 1907. [6098] Clerk.

Application of the Boston, Revere Beach and Lynn Railroad Company for approval of the use of automatic block signals.

After consideration, — it is

Ordered, That the approval of the Board be given to the use upon the Boston, Revere Beach and Lynn railroad of the automatic block signal devices known as the Union Electric Semaphore and the Union Disc signals.

Attest: CHARLES E. MANN,
JANUARY 16, 1907. [6067] Clerk.

Petition of the Boston Terminal Company for approval of the use of interlocking signal system.

After consideration, — it is

Ordered, That the approval of the Board be given to the use upon the property of the Boston Terminal Company of the interlocking signal system known as the Electric Pneumatic Interlocking Signal System, as shown on blue print marked "The Boston Terminal Company, Diagram of Tracks and Signals at the South Station", on file with the petition.

Attest:

CHARLES E. MANN,

NOVEMBER 7, 1907.

[6751]

Clerk.

Petition of the New York, New Haven and Hartford Railroad Company for approval of the use of block signals.

After consideration, — it is

Ordered, That the approval of the Board be given to the use upon the New York, New Haven and Hartford railroad of automatic disc signals as shown on blue print marked "M 35, February 14, 1907"; also standard signals as shown on blue print marked "M 14-A, May 17, 1907" and further explained on blue print marked "M 31, May 13, 1907," said blue prints being upon file with the petition.

Attest:

CHARLES E. MANN,

JULY 10, 1907.

[6483]

Clerk.

BRIDGES, RAILROAD AND RAILWAY.

BRIDGES AT HEIGHT LESS THAN EIGHTEEN FEET.

Petition of selectmen of Kingston for approval of bridge over Old Colony railroad at height of less than eighteen feet.

Although this petition deals with an existing bridge over a railroad, which has long been in use as a private way, it is necessary to deal with the case as though the proposed highway over the railroad involved the construction of a new bridge.

In exceptional instances highway bridges over a railroad have been approved with a clearance of sixteen feet between the structure and the tracks, but this has been only in cases where a greater clearance has been practically prohibited by physical conditions.

In the surroundings of the bridge now under consideration a clearance of at least seventeen feet between the structure and the tracks could be secured without any serious interference with highways, or disproportionate invasion of private property. The company contends that the bridge should be reconstructed at a height of at least eighteen feet above the tracks, but in our judgment neither the present nor the prospective uses of this railroad call for a bridge at that elevation.

The Board declines to approve the maintenance of the present structure as a public highway over the railroad, but will approve a bridge at this point at a height not less than seventeen feet in the clear above the tracks.

For the Board,

JAMES F. JACKSON,

MARCH 1, 1907. [6379]

Chairman.

Petition of the mayor of Medford for approval of height of bridge over the Boston and Maine railroad.

After consideration, — it is

Ordered, That the consent of the Board be hereby given to the construction of a foot-bridge over the tracks of the Boston and

Maine railroad in the city of Medford, connecting Pembroke street with Otis street, at a clear height of not less than sixteen (16) feet above the tracks of the railroad.

Attest: CHARLES E. MANN,
JULY 18, 1907. [6644] *Clerk.*

Petition of the Boston and Maine Railroad for approval of height of bridge in Rowley.

After consideration, — it is

Ordered, That the consent of the Board be hereby given to the construction of a bridge over the tracks of the Boston and Maine railroad near Bean's crossing in the town of Rowley, at a clear height between the top of the outer rails of the railroad and the arch of the bridge of seventeen (17) feet six (6) inches, and at a distance two (2) feet six (6) inches from the outer rails of seventeen (17) feet, as shown on a plan filed with the petition.

Attest: CHARLES E. MANN,
JULY 29, 1907. [6664] *Clerk.*

APPROVAL OF FOOTBRIDGE, BOSTON.

Petition of the Boston Elevated Railway Company for approval of plan of foot-bridge over Commercial street near North street in Boston.

The annexed plan, numbered 11514, showing proposed location, form and method of construction of a foot-bridge over Commercial street near North street, connecting the Lincoln power station with the elevated railway structure, in the city of Boston, the same being a modification of plan numbered 25034, approved by the Board July 11, 1898, and of plan numbered 26160, approved by the Board December 4, 1899, is hereby approved, consent being given to the changes shown.

JAMES F. JACKSON,
GEORGE W. BISHOP,
CLINTON WHITE,
JUNE 28, 1907. [6595] *Commissioners.*

APPROVAL OF STREET RAILWAY BRIDGE PLANS.

During the year ending December 31, 1907, the Board, on the recommendation of Professor George F. Swain, bridge engineer, has approved plans submitted for street railway bridges, as follows:

Springfield and Eastern Street Railway.

February 26, 1907 — Plans for truss bridge over Quaboag river; plate girder bridge over river in Brimfield; plate girder bridge at Dunhamtown road in Brimfield; plate girder bridge over Quinnebaug river in Brimfield; truss bridge over Quinnebaug river in Brimfield; bridge No. 4 on the Fiskdale extension. [6487]

Hartford and Worcester Street Railway.

March 23, 1907 — Plans for two bridges, No. 7 and No. 8 on the Fiskdale extension in Sturbridge. [6504]

Old Colony Street Railway.

April 8, 1907 — Three plans for strengthening the Raynham trestle near Raynham station. [6529]

Boston and Northern Street Railway.

July 24, 1907 — Plans for reconstruction of bridge over the Boston and Maine railroad tracks at Andover. [6649]

CAPITAL STOCK AND BONDS.

Petition of the Berkshire Street Railway Company for approval of an issue of additional capital stock.

It appearing, after notice and hearing and further investigation, that the proposed issue of stock is for a lawful purpose and is consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to the issue by the Berkshire Street Railway Company of additional shares of capital stock not exceeding two thousand five hundred (2,500) in number, amounting at par value to two hundred fifty thousand dollars (\$250,000), as an issue of stock reasonably necessary and of the amount required for paying certain floating indebtedness properly incurred in the construction and equipment of its railway and in the purchase of property necessary for its operation, and described in the schedules and memorandum on file with the petition.

And it is *Determined*, That the value at which the new shares of stock shall be offered to the stockholders who may be entitled to take the same according to law is one hundred dollars (\$100) per share.

Attest: CHARLES E. MANN,

APRIL 18, 1907.

[6409]

Clerk.

Petition of the Boston Elevated Railway Company for approval of an issue of bonds.

It appearing, after notice and hearing and further investigation, that the proposed issue of bonds is for lawful purposes and is consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to the issue by the Boston Elevated Railway Company of coupon or registered bonds to an amount not exceeding at par value five million eight hundred thousand dollars (\$5,800,000), payable not more than thirty years from date thereof and bearing interest at a rate not exceeding five per cent per annum, as an issue of bonds reason-

ably necessary and of the amount required for the purposes to which the proceeds of such bonds are to be applied as hereinafter specifically set out, the items of expenditure being named in a schedule on file with the petition :

1. The proceeds of bonds amounting at par value to eight hundred thousand dollars (\$800,000) shall be applied to the payment of necessary engineering and miscellaneous expenses incurred and to be incurred.

2. The proceeds of bonds amounting at par value to three hundred ten thousand dollars (\$310,000) shall be applied to the payment of the necessary cost of construction and equipment of the elevated structure, foundations, tracks and electric system.

3. The proceeds of bonds amounting at par value to nine hundred twenty thousand dollars (\$920,000) shall be applied to the necessary cost incurred and to be incurred in the construction and equipment of power stations.

4. The proceeds of bonds amounting at par value to four hundred sixty thousand dollars (\$460,000) shall be applied to the necessary cost, exclusive of expenditures for land, incurred and to be incurred in construction and equipment of terminal and other stations.

5. The proceeds of bonds amounting at par value to seven hundred eighty thousand dollars (\$780,000) shall be applied to the necessary cost incurred and to be incurred in the purchase and equipment of rolling stock.

6. The proceeds of bonds amounting at par value to two million four hundred thousand dollars (\$2,400,000) shall be applied to the payment of the necessary cost of real estate purchased, and to the payment of damages caused by the construction of the railway.

7. The proceeds of bonds amounting at par value to thirty thousand dollars (\$30,000) shall be applied to the payment of the necessary cost incurred and to be incurred in the purchase of machinery, tools and of miscellaneous equipment of railway.

8. The proceeds of bonds amounting at par value to one hundred thousand dollars (\$100,000) shall be applied to the payment of the necessary cost of equipment of tunnels.

Any excess in the proceeds of this issue of bonds which may be realized from premiums shall be held for such application to cost of other permanent additions to and improvements in the property of the company as the Board shall hereafter approve.

Attest:

CHARLES E. MANN,

JUNE 15, 1907.

[6538]

Clerk.

Petition of the Boston and Lowell Railroad Corporation for approval of an issue of bonds.

It appearing, after notice and hearing and upon further investigation, that the proposed issue of bonds is for a lawful purpose and is consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to an issue by the Boston and Lowell Railroad Corporation of coupon or registered bonds to an amount not exceeding at par value three hundred twenty-five thousand dollars (\$325,000), to be dated July 1, 1907, payable twenty years from date thereof and bearing interest at the rate of four per cent per annum, as an issue of bonds reasonably necessary and of the amount required for the purpose of refunding certain bonds of the company maturing July 1, 1907.

Any excess in the proceeds of this issue of bonds which may be realized from premiums shall be held for application to the cost of permanent additions to and improvements upon the railroad property, in accordance with the terms of the lease to the Boston and Maine Railroad.

Attest: CHARLES E. MANN,

APRIL 12, 1907. [6530]

Clerk.

Petition of the Boston and Lowell Railroad Corporation for approval of an issue of additional capital stock.

It appearing, after notice and hearing and further investigation, that the proposed issue of capital stock is for a lawful purpose and is consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to the issue by the Boston and Lowell Railroad Corporation of additional shares of capital stock not exceeding two thousand five hundred (2,500) in number, amounting at par value to two hundred fifty thousand dollars (\$250,000), as an issue of stock reasonably necessary and of the amount required for the purpose of paying the cost of certain permanent additions to and improvements upon the property of the petitioner made under and in accordance with the provisions of the lease of its railroad and property to the Boston and Maine Railroad.

It further appearing that the directors desire to dispose of said stock by public auction in the manner provided by law and that the amount of this issue does not exceed four per cent of the existing capital stock of the company, it is

Ordered, That the two thousand five hundred (2,500) shares of capital stock, the issue of which is herein authorized be offered for sale by public auction in the city of Boston to the highest bidder at not less than par value to be actually paid in cash; and that the Boston Daily Advertiser, the Boston Transcript, and the Boston Herald be prescribed as the daily newspapers in which notice of the time and place of such sale shall be published at least five times during the ten days immediately preceding the sale.

Attest: CHARLES E. MANN,
JULY 1, 1907. [6593] *Clerk.*

Petition of the Boston and Northern Street Railway Company for approval of an issue of additional capital stock.

It appearing, after notice and hearing and further investigation, that the proposed issue of stock is for a lawful purpose and is consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to the issue by the Boston and Northern Street Railway Company of additional shares of capital stock not exceeding three thousand (3,000) in number, amounting at par value to three hundred thousand dollars (\$300,000), as an issue of stock reasonably necessary and of the amount required for paying the cost of the rolling stock and equipment described in the schedule and report on file with the petition, the same being in addition to rolling stock to be provided in maintenance of property.

And it is *Determined*, That the value at which the new shares of stock shall be offered to the stockholders who may be entitled to take the same according to law is one hundred dollars (\$100) per share.

Attest: CHARLES E. MANN,
JANUARY 2, 1907. [6347] *Clerk.*

Petition of the Boston and Northern Street Railway Company for approval of the American Trust Company as trustee under its mortgage of July 1, 1904.

After consideration, — it is

Ordered, That the approval of the Board be hereby given to the substitution of the American Trust Company as trustee in place of the Adams Trust Company under the indenture of trust

and mortgage from the Boston and Northern Street Railway Company to the Adams Trust Company, executed under date of July 1, 1904.

Attest: CHARLES E. MANN,
APRIL 30, 1907. [6545] Clerk.

Petition of the Boston and Northern Street Railway Company for approval of an issue of bonds.

It appearing, after notice and hearing and further investigation, that the proposed issue of bonds is for a lawful purpose and is consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to the issue by the Boston and Northern Street Railway Company of coupon or registered bonds to an amount not exceeding at par value four hundred ten thousand dollars (\$410,000), payable in fifty years from date thereof and bearing interest at the rate of four per cent per annum, as an issue of bonds reasonably necessary and of the amount required for the purpose of paying certain floating indebtedness properly incurred in the construction and equipment of the railway and in the purchase of property necessary for its operation.

Attest: CHARLES E. MANN,
NOVEMBER 15, 1907. [6698] Clerk.

Petition of the Boston and Worcester Street Railway Company for approval of an issue of additional capital stock.

It appearing, after notice and hearing and further investigation, that the proposed issue of stock is for a lawful purpose and is consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to the issue by the Boston and Worcester Street Railway Company of additional shares of capital stock not exceeding three thousand (3,000) in number, amounting at par value to three hundred thousand dollars (\$300,000), as an issue of stock reasonably necessary and of the amount required for paying certain floating indebtedness properly incurred in the construction and equipment of its railway and in the purchase of property necessary for its operation.

And it is *Determined*, That the value at which the new shares of stock shall be offered to the stockholders who may be entitled

to take the same according to law is one hundred dollars (\$100) per share.

OCTOBER 28, 1907. Attest: CHARLES E. MANN,
[6738] Clerk.

Petition of the Boston and Worcester Street Railway Company for approval of an issue of bonds.

It appearing, after notice and hearing and further investigation, that the proposed issue of bonds is for a lawful purpose and is consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to the issue by the Boston and Worcester Street Railway Company of coupon or registered bonds to an amount not exceeding at par value three hundred thousand dollars (\$300,000), payable in twenty years from date thereof and bearing interest at the rate of four and one-half per cent per annum, as an issue of bonds reasonably necessary and of the amount required for the purpose of paying certain floating indebtedness properly incurred in the construction and equipment of the railway and in the purchase of property necessary for its operation.

NOVEMBER 13, 1907. Attest: CHARLES E. MANN,
[6787] Clerk.

Petition of the Brockton and Plymouth Street Railway Company for approval of an issue of additional capital stock.

It appearing, after notice and hearing, and further investigation, that the proposed issue of stock is for a lawful purpose and is consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to the issue by the Brockton and Plymouth Street Railway Company of additional shares of capital stock not exceeding one thousand one hundred (1,100) in number, amounting at par value to one hundred ten thousand dollars (\$110,000), as an issue of stock reasonably necessary and of the amount required for paying certain floating indebtedness properly incurred in the construction and equipment of its railway and in the purchase of property necessary for its operation.

And it is *Determined*, That the value at which the new shares

of stock shall be offered to the stockholders who may be entitled to take the same according to law is one hundred dollars (\$100) per share.

Attest: CHARLES E. MANN,
SEPTEMBER 12, 1907. [6679] Clerk.

Petition of the Chatham Railroad Company for authority to issue a note for refunding outstanding obligations.

It appearing, after notice and hearing, and further investigation, that the proposed issue is for a lawful purpose and is consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to the issue by the Chatham Railroad Company of a note to the amount of nine thousand dollars (\$9,000) payable in five years from date thereof and bearing interest at the rate of six per cent per annum, as reasonably necessary for refunding in part certain outstanding bonds of the company which mature November 1, 1907.

Attest: CHARLES E. MANN,
OCTOBER 7, 1907. [6717] Clerk.

Petition of the Citizens Electric Street Railway Company for modification in the form of an order of the Board approving an issue of bonds.

It appearing that the change in the order of the Board which is desired by the petitioner is a reasonable one, and in no way inconsistent with the public interests, — it is

Decreed, That the order of the Board dated November 23, 1900, approving an issue of bonds by the petitioner, to an amount not exceeding \$230,000, for certain lawful purposes be hereby amended in the second paragraph by adding at the end thereof the words "including sub-station", so as to read as follows:

2. The proceeds of bonds amounting at par value to \$21,000 shall be applied exclusively to the payment of the necessary cost of additions to the power plant of said company, including sub-station.

Attest: CHARLES E. MANN,
MARCH 21, 1907. [6519] Clerk.

Petition of the Concord, Maynard and Hudson Street Railway Company for approval of an issue of bonds.

It appearing, after notice and hearing and further investigation, that the proposed issue of bonds is for a lawful purpose and is consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to the issue by the Concord, Maynard and Hudson Street Railway Company of coupon or registered bonds to an amount not exceeding at par value ten thousand dollars (\$10,000), payable in twenty years from date thereof and bearing interest at a rate not to exceed five per cent per annum, as an issue of bonds reasonably necessary and of the amount required for the purpose of paying certain floating indebtedness properly incurred in the construction and equipment of the railway and in the purchase of property necessary for its operation.

Attest: CHARLES E. MANN,
NOVEMBER 15, 1907. [6728] Clerk.

Petition of the Fitchburg and Leominster Street Railway Company for approval of an issue of additional capital stock.

It appearing, after notice and hearing and further inquiry, including an examination of the assets and liabilities of the petitioner and an appraisal of its property, that the proposed issue of stock is for a lawful purpose and is consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to the issue by the Fitchburg and Leominster Street Railway Company of additional shares of capital stock not exceeding two thousand five hundred (2,500) in number, amounting at par value to two hundred fifty thousand dollars (\$250,000), as an issue of stock reasonably necessary and of the amount required for paying certain floating indebtedness properly incurred in the construction and equipment of its railway and in the purchase of property necessary for its operation.

And it is *Determined*, That the value at which the new shares of stock shall be offered to the stockholders who may be entitled to take the same according to law is one hundred ten dollars (\$110) per share.

Attest: CHARLES E. MANN,
SEPTEMBER 17, 1907. [6683] Clerk.

*Petition of the Gardner, Westminster and Fitchburg Street Railway
Company for approval of an issue of bonds.*

It appearing, after notice and hearing, and further investigation, that the proposed issue of bonds is for a lawful purpose and is consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to the issue by the Gardner, Westminster and Fitchburg Street Railway Company of coupon or registered bonds to an amount not exceeding at par value thirty-five thousand dollars (\$35,000), payable in twenty years from date thereof and bearing interest at the rate of five per cent per annum, as an issue of bonds reasonably necessary and of the amount required for the purpose of paying certain floating indebtedness properly incurred in the construction and equipment of the railway and in the purchase of property necessary for its operation, and described in the schedule on file with the petition.

Attest:

CHARLES E. MANN,

MARCH 7, 1907.

[6428]

Clerk.

*Petition of the Holyoke Street Railway Company for approval of
an issue of additional capital stock.*

It appearing, after notice and hearing, and upon further investigation, that the proposed issue of stock is for a lawful purpose and is consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to an issue by the Holyoke Street Railway Company of additional shares of capital stock not exceeding nine hundred thirty-six (936) in number, amounting at par value to ninety-three thousand six hundred dollars (\$93,600), as an issue of stock reasonably necessary and of the amount required for the purpose of paying certain outstanding bonds issued by the Amherst and Sunderland Street Railway Company, payment of which has been assumed by the petitioner, the proceeds of said stock to be applied to that and no other purpose.

And it is *Determined*, That the value at which the new shares of stock shall be offered to the stockholders who may be entitled to take the same according to law is one hundred twenty-five dollars (\$125) per share.

Attest:

CHARLES E. MANN,

DECEMBER 23, 1907.

[6821]

Clerk.

Petition of the Lowell and Fitchburg Street Railway Company for approval of an issue of additional capital stock.

It appearing, after notice and hearing and further inquiry, including an examination of the assets and liabilities of the petitioner and an appraisal of its property, that the proposed issue of additional capital stock is for a lawful purpose and is consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to the issue by the Lowell and Fitchburg Street Railway Company of additional shares of capital stock not exceeding seven hundred fifty (750) in number, amounting at par value to seventy-five thousand dollars (\$75,000), as an issue of stock reasonably necessary and of the amount required for paying certain floating indebtedness properly incurred in the construction and equipment of its railway and in the purchase of property necessary for its operation.

And it is *Determined*, That the value at which the new shares of stock shall be offered to the stockholders who may be entitled to take the same according to law is one hundred dollars (\$100) per share.

Attest: CHARLES E. MANN,
JANUARY 12, 1907. [6389] Clerk.

Petition of the Lowell and Fitchburg Street Railway Company for approval of an issue of bonds.

It appearing, after notice and hearing and further inquiry, including an examination of the assets and liabilities of the petitioner and an appraisal of its property, that the proposed issue of bonds is for a lawful purpose and is consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to the issue by the Lowell and Fitchburg Street Railway Company of coupon or registered bonds to an amount not exceeding at par value seventy-five thousand dollars (\$75,000), payable in twenty years from date thereof and bearing interest at the rate of five per cent per annum, as an issue of bonds reasonably necessary and of the amount required for the purpose of paying certain floating indebtedness properly incurred in the construction and equipment of the railway and in the purchase of property necessary for its operation.

Attest: CHARLES E. MANN,
JANUARY 30, 1907. [6455] Clerk.

Petition of the Nantucket Central Railroad Company for approval of an issue of bonds.

It appearing, after notice and hearing and further investigation, that the proposed issue of bonds is for a lawful purpose and is consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to the issue by the Nantucket Central Railroad Company of coupon or registered bonds to an amount not exceeding at par value seventeen thousand dollars (\$17,000), payable in ten years from date thereof and bearing interest at the rate of six per cent per annum, as an issue of bonds reasonably necessary and of the amount required for the purpose of refunding certain outstanding bonds of the company.

Any excess in the proceeds of this issue of bonds which may be realized from premiums shall be held for such application to the cost of permanent additions to and improvements in the property of the company as the Board shall hereafter approve.

Attest: CHARLES E. MANN,

JUNE 19, 1907. [6586]

Clerk.

Petition of the New York, Brockton and Boston Canal and Transportation Company for authority to issue stock.

It appearing, after notice and hearing and further investigation, that an issue of capital stock to the amount and for the purposes hereinafter named is consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to the issue by the New York, Brockton and Boston Canal and Transportation Company of shares of capital stock not exceeding one hundred seventy-two (172) in number, amounting at par value to seventeen thousand two hundred dollars (\$17,200), as an issue of stock reasonably necessary and of the amount required for the purposes hereinafter named:

1. The proceeds of shares not exceeding one hundred (100) in number, amounting at par value to ten thousand dollars (\$10,000), are to be applied to the refunding to the Commonwealth of certain money expended by the Board of Harbor and Land Commissioners under chapter 104 of the Resolves of the year 1901, as provided in section 22 of chapter 532 of the Acts of 1906.

2. The proceeds of shares not exceeding seventy-two (72) in number, amounting at par value to seven thousand two hundred

dollars (\$7,200), are to be applied toward the payment of the necessary cost for engineering, legal and other expenses already incurred in the formation of the company and for similar services immediately to be required.

Said shares are to be issued to the subscribers to the capital stock of the company, or their assigns, upon the full payment of the par value thereof in cash.

Attest: CHARLES E. MANN,

JUNE 22, 1907. [6549]

Clerk.

Petition of the Old Colony Railroad Company for approval of an issue of stock.

It appearing, after notice and hearing, and further consideration, that the proposed issue of stock is for a lawful purpose and is consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to the issue by the Old Colony Railroad Company of additional shares of capital stock not exceeding seventy-six (76) in number, amounting at par value to seven thousand six hundred dollars (\$7,600), as an issue of stock reasonably necessary and of the amount required under the special legislation relating thereto, for the purpose of exchange for shares of the Boston, Clinton and Fitchburg Railroad Company, preferred, of the Framingham and Lowell Railroad Company, of the Lowell and Framingham Railroad Company, preferred, of the Lowell and Framingham Railroad Company, common stock, and of the Fall River Railroad Company, as shown on a schedule on file with the petition under the special legislation relating thereto; *provided, however*, that the shares of new stock which the Old Colony Railroad Company shall thus receive in exchange shall be sold by public auction in Boston to the highest bidder at not less than par value; the proceeds to be applied to the making of permanent additions to and improvements in the railroad property, or to the payment of debts incurred for such additions and improvements.

And it is *Determined*, That the Boston Daily Advertiser, the Boston Transcript and the Boston Herald be prescribed as the daily newspapers in which notice of the time and place of such sale shall be published at least five times during the ten days immediately preceding the sale.

Attest: CHARLES E. MANN,

OCTOBER 21, 1907. [6676]

Clerk.

*Petition of the Old Colony Street Railway Company for approval
of an issue of additional capital stock.*

It appearing, after notice and hearing and further investigation, that the proposed issue of stock is for a lawful purpose and is consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to the issue by the Old Colony Street Railway Company of additional shares of capital stock not exceeding two thousand (2,000) in number, amounting at par value to two hundred thousand dollars (\$200,000), as an issue of stock reasonably necessary and of the amount required for paying certain floating indebtedness properly incurred in the construction and equipment of its railway and in the purchase of property necessary for its operation, as shown on the schedule and report on file with the petition.

And it is *Determined*, That the value at which the new shares of stock shall be offered to the stockholders who may be entitled to take the same according to law is one hundred dollars (\$100) per share.

Attest: CHARLES E. MANN,

JANUARY 2, 1907. [6348] Clerk.

*Petition of the Old Colony Street Railway Company for approval
of an issue of bonds.*

It appearing, after notice and hearing and further investigation, that the proposed issue of bonds is for a lawful purpose and is consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to the issue by the Old Colony Street Railway Company of coupon or registered bonds to an amount not exceeding at par value two hundred thousand dollars (\$200,000), payable in fifty years from date thereof and bearing interest at the rate of four per cent per annum, as an issue of bonds reasonably necessary and of the amount required for the purpose of paying certain floating indebtedness properly incurred in the construction and equipment of the railway and in the purchase of property necessary for its operation.

Attest: CHARLES E. MANN,

NOVEMBER 15, 1907. [6699] Clerk.

Petition of the Pittsfield Electric Street Railway Company for approval of an issue of bonds.

It appearing, after notice and hearing, and upon further investigation, that the proposed issue of bonds is for a lawful purpose and is consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to the issue by the Pittsfield Electric Street Railway Company of coupon or registered bonds to an amount not exceeding at par value one hundred thousand dollars (\$100,000), payable July 1, 1923, and bearing interest at the rate of four per cent per annum, as an issue of bonds reasonably necessary and of the amount required for the purpose of paying certain floating indebtedness properly incurred in the construction and equipment of the railway and in the purchase of property necessary for its operation, and described in a schedule on file with the petition.

Attest: CHARLES E. MANN,
APRIL 8, 1907. [6479] Clerk.

Petition of Alden E. Viles and others for approval of name and amount of capital stock of corporation to be organized by purchasers of the South Middlesex street railway.

It appearing, after notice and hearing, that the petitioners are purchasers of the property of the South Middlesex Street Railway Company at a sale by receiver under order of Court and that they intend to apply to the Secretary of the Commonwealth for a charter under the name of the Middlesex and Boston Street Railway Company and with a capital of three hundred thousand dollars (\$300,000); that the name is a suitable one and that the amount fixed as the capital stock does not exceed the fair cost of replacing the railway and property acquired at said sale less outstanding mortgage indebtedness, — it is

Ordered, That the approval of the Board be hereby given to the name and amount of capital stock defined as above stated.

Attest: CHARLES E. MANN,
JULY 22, 1907. [6633] Clerk.

*Petition of the Springfield Street Railway Company for approval
of an issue of additional capital stock.*

It appearing, after notice and hearing and further investigation, that the proposed issue of stock is for a lawful purpose and is consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to the issue by the Springfield Street Railway Company of additional shares of capital stock not exceeding three thousand (3,000) in number, amounting at par value to three hundred thousand dollars (\$300,000), as an issue of stock reasonably necessary and of the amount required for paying certain floating indebtedness properly incurred in the construction and equipment of its railway and in the purchase of property necessary for its operation, and described in the schedule and a memorandum on file with the petition.

And it is *Determined*, That the value at which the new shares of stock shall be offered to the stockholders who may be entitled to take the same according to law is one hundred seventy dollars (\$170) per share.

Attest: CHARLES E. MANN,
MARCH 9, 1907. [6408] Clerk.

*Petition of the Springfield and Eastern Street Railway Company
for approval of an issue of additional capital stock.*

It appearing, after notice and hearing and further investigation, that the proposed issue of stock is for a lawful purpose and is consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to the issue by the Springfield and Eastern Street Railway Company of additional shares of capital stock not exceeding five thousand three hundred (5,300) in number, amounting at par value to five hundred thirty thousand dollars (\$530,000), as an issue of stock reasonably necessary and of the amount required for paying certain floating indebtedness properly incurred in the construction and equipment of its railway and in the purchase of property necessary for its operation.

And it is *Determined*, That the value at which the new shares of stock shall be offered to the stockholders who may be entitled to take the same according to law is one hundred dollars (\$100) per share.

Attest: CHARLES E. MANN,
JULY 17, 1907. [6564] Clerk.

*Petition of the Springfield and Eastern Street Railway Company
relative to sale of stock at auction.*

It appearing that there remain unsubscribed by stockholders of the Springfield and Eastern Street Railway Company entitled to take them two hundred sixty-two (262) shares of the common stock which the company was authorized to issue under the order of this Board dated July 17, 1907, — it is

Ordered, That the two hundred sixty-two (262) shares of capital stock remaining unsubscribed as aforesaid be offered for sale by public auction in the city of Boston to the highest bidder at not less than par value to be actually paid in cash; and that the Boston Daily Advertiser, the Boston Transcript and the Boston Post be prescribed as the daily newspapers in which notice of the time and place of such sale shall be published at least five times during the ten days immediately preceding the sale.

Attest: ALLAN BROOKS,
AUGUST 29, 1907. [6706] *Assistant Clerk.*

*Petition of the Uxbridge and Blackstone Street Railway Company
for approval of an issue of bonds.*

It appearing, after notice and hearing and further investigation, that the proposed issue of bonds is for a lawful purpose and is consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to the issue by the Uxbridge and Blackstone Street Railway Company of coupon or registered bonds to an amount not exceeding at par value forty thousand dollars (\$40,000), payable twenty years from date thereof and bearing interest at the rate of five per cent per annum, as an issue of bonds reasonably necessary and of the amount required for the purpose of paying certain floating indebtedness properly incurred in the construction and equipment of the railway and in the purchase of property necessary for its operation.

Attest: CHARLES E. MANN,
JULY 17, 1907. [6565] *Clerk.*

Petition of the West End Street Railway Company for approval of an issue of additional capital stock and application of proceeds of former issues of stock and bonds.

It appearing, after notice and hearing, and upon further investigation, that the proposed issue of stock is for a lawful purpose and is consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to an issue by the West End Street Railway Company of additional shares of capital stock not exceeding eight thousand four hundred (8,400) in number, amounting at par value to four hundred twenty thousand dollars (\$420,000), as an issue of stock reasonably necessary and of the amount required for the purpose of paying in part the necessary cost of permanent additions to and improvements in the railway property of the petitioner made by the Boston Elevated Railway Company in accordance with the terms of the lease between said companies and described in the schedule on file with the petition.

And it is *Determined*, That the value at which the new shares of stock shall be offered to the stockholders who may be entitled to take the same according to law is eighty-five dollars (\$85) per share.

And it is further

Ordered, That the approval of the Board be hereby given to the application of fifty-three thousand seven hundred forty-two dollars and fifty-two cents (\$53,742.52), realized as a part of the proceeds of bonds and stock issued under orders of the Board dated respectively July 27, 1904, September 1, 1904, February 11, 1905, and December 12, 1906, and being the amount received by the company in excess of that named in said orders as requisite for the purposes therein described, toward the cost of permanent additions to and improvements in the property of the company made under the terms of the above named lease and described in the above named schedule.

Attest: CHARLES E. MANN,

MARCH 30, 1907.

[6502]

Clerk.

Petition of the West End Street Railway Company relative to sale of stock at auction.

It appearing that there remain unsubscribed by stockholders of the West End Street Railway Company entitled to take them

one thousand one hundred and thirty (1,130) shares of the common stock which the company was authorized to issue under the order of this Board dated March 30, 1907, — it is

Ordered, That the one thousand one hundred and thirty (1,130) shares of capital stock remaining unsubscribed as aforesaid be offered for sale by public auction in the city of Boston to the highest bidder at not less than par value to be actually paid in cash; and that the Boston Daily Advertiser, the Boston Transcript and the Boston Herald be prescribed as the daily newspapers in which notice of the time and place of such sale shall be published at least five times during the ten days immediately preceding the sale.

Attest: CHARLES E. MANN,
JUNE 4, 1907. [6580] *Clerk.*

Petition of the West End Street Railway Company for approval of an issue of additional capital stock.

It appearing, after notice and hearing and upon further investigation, that the proposed issue of stock is for a lawful purpose and is consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to an issue by the West End Street Railway Company of additional shares of capital stock not exceeding twenty thousand two hundred eighteen (20,218) in number, amounting at par value to one million ten thousand nine hundred dollars (\$1,010,900), as an issue of stock reasonably necessary and of the amount required for the purpose of paying in part the necessary cost of permanent additions to and improvements in the railway property of the petitioner made by the Boston Elevated Railway Company in accordance with the terms of the lease between said companies and described in the schedule on file with the petition.

And it is *determined*, That the value at which the new shares of stock shall be offered to the stockholders who may be entitled to take the same according to law is seventy dollars (\$70) per share plus the amount of dividends which shall have accrued on said stock under the provisions of the lease to the Boston Elevated Railway Company at the date of payment for the same.

Attest: CHARLES E. MANN,
DECEMBER 20, 1907. [6816] *Clerk.*

Petition of the Worcester Consolidated Street Railway Company for approval of an issue of bonds.

It appearing, after notice and hearing and further investigation, that the proposed issue of bonds is for a lawful purpose and is consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to the issue by the Worcester Consolidated Street Railway Company of coupon or registered bonds to an amount not exceeding at par value one million dollars (\$1,000,000), payable in not less than ten years nor more than twenty years from date thereof, and bearing interest at a rate not to exceed five per cent per annum, as an issue of bonds reasonably necessary and of the amount required for the purpose of paying certain floating indebtedness properly incurred in the construction and equipment of the railway and in the purchase of property necessary for its operation.

Attest: CHARLES E. MANN,
OCTOBER 9, 1907. [6615] Clerk.

Petition of the Worcester Consolidated Street Railway Company for approval of an issue of bonds.

It appearing, after notice and hearing and further investigation, that the proposed issue of bonds is for a lawful purpose and is consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to the issue by the Worcester Consolidated Street Railway Company of coupon or registered bonds to an amount not exceeding at par value two hundred thousand dollars (\$200,000), payable in not less than ten years nor more than twenty years from date thereof, and bearing interest at a rate not to exceed five per cent per annum, as an issue of bonds reasonably necessary and of the amount required for the purpose of paying certain floating indebtedness properly incurred in the construction and equipment of the railway and in the purchase of property necessary for its operation.

Attest: CHARLES E. MANN,
DECEMBER 10, 1907. [6801] Clerk.

*Petition of the Worcester and Holden Street Railway Company
for approval of an issue of additional capital stock.*

It appearing, after notice and hearing and further investigation, that the proposed issue of stock is for a lawful purpose and is consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to the issue by the Worcester and Holden Street Railway Company of additional shares of capital stock not exceeding four hundred (400) in number, amounting at par value to forty thousand dollars (\$40,000), as an issue of stock reasonably necessary and of the amount required for paying certain floating indebtedness properly incurred in the construction and equipment of its railway and in the purchase of property necessary for its operation.

And it is *determined*, That the value at which the new shares of stock shall be offered to the stockholders who may be entitled to take the same according to law is one hundred dollars (\$100) per share.

Attest: CHARLES E. MANN,
NOVEMBER 2, 1907. [6766] Clerk.

*Petition of the Worcester and Southbridge Street Railway Com-
pany for approval of an issue of additional capital stock.*

It appearing, after notice and hearing and further investigation, that the proposed issue of stock is for a lawful purpose and is consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to the issue by the Worcester and Southbridge Street Railway Company of additional shares of capital stock not exceeding five hundred (500) in number, amounting at par value to fifty thousand dollars (\$50,000), as an issue of stock reasonably necessary and of the amount required for paying certain floating indebtedness properly incurred in the construction and equipment of its railway and in the purchase of property necessary for its operation, and described in the first two items of the schedule on file with the petition.

And it is *Determined*, That the value at which the new shares of stock shall be offered to the stockholders who may be entitled to take the same according to law is one hundred dollars (\$100) per share.

Attest: CHARLES E. MANN,
MARCH 6, 1907. [6410] Clerk.

RAILROAD AND RAILWAY CONSOLIDATIONS.

Petition of the Amherst and Sunderland and the Holyoke street railway companies for approval of terms of purchase and sale, and of the Holyoke Street Railway Company for authority to issue additional capital stock.

It appearing, after notice and hearing, that the railways of the contracting companies connect; that the Amherst and Sunderland Street Railway Company is to transfer all of its property and franchises to the Holyoke Street Railway Company, which is to assume and pay all outstanding debts and obligations of the selling company; that the purchase and sale involves no decrease in the facilities for travel and no increase in the rates of fare, and is consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to the terms of this contract of purchase and sale, a copy of which is upon file in this office.

And it appearing that an increase in the capital stock of the Holyoke Street Railway Company is reasonably requisite for the purpose of effecting an exchange of stock, share for share; and that an issue of this additional stock involves no increase in the aggregate amount of the capital stock and indebtedness of these companies, — it is

Ordered, That the approval of the Board be hereby given to an increase in the capital stock of the Holyoke Street Railway Company by the issue of shares not exceeding twelve hundred (1200) in number, amounting at par value to one hundred twenty thousand dollars (\$120,000), the said shares to be issued for the purpose of carrying out the terms of said contract and in exchange, share for share, for the outstanding shares of the Amherst and Sunderland Street Railway Company, the certificates of the last named shares to be upon exchange surrendered and cancelled.

Attest:

CHARLES E. MANN,

JULY 30, 1907.

[6655]

Clerk.

Petition of the Holyoke and the Hampshire street railway companies for approval of terms of purchase and sale, and of the Holyoke Street Railway Company for authority to issue additional capital stock.

It appearing, after notice and hearing, that the railways of the contracting companies connect; that the Hampshire Street Railway Company is to transfer all of its property and franchises to the Holyoke Street Railway Company, which is to assume and pay all outstanding debts and obligations of the selling company; that the purchase and sale involves no decrease in the facilities for travel and no increase in the rates of fare, and is consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to the terms of this contract of purchase and sale, a copy of which is upon file in this office.

And it appearing that an increase in the capital stock of the Holyoke Street Railway Company is reasonably requisite for the purpose of effecting an exchange of stock, share for share; and that an issue of this additional stock involves no increase in the aggregate amount of the capital stock and indebtedness of these companies, — it is

Ordered, That the approval of the Board be hereby given to an increase in the capital stock of the Holyoke Street Railway Company by the issue of shares not exceeding six hundred (600) in number, amounting at par value to sixty thousand dollars (\$60,000), the said shares to be issued for the purpose of carrying out the terms of said contract and in exchange, share for share, for the outstanding shares of the Hampshire Street Railway Company, the certificates of the last named shares to be upon exchange surrendered and cancelled.

Attest:

CHARLES E. MANN,

JUNE 28, 1907. [6598]

Clerk.

Petition of the New England and the New York, New Haven and Hartford railroad companies for approval of terms of consolidation.

One dissenting stockholder, holding ten shares in the capital stock of the New England Railroad Company, objects to the proposed consolidation of that company with the New York, New Haven and Hartford, admittedly on account of a difference of

view about the price to be paid for these ten shares. As the law provides for a jury to settle that issue there is no need of giving it attention at this time.

The proposed consolidation is one which has been before recommended as beneficial in bringing these railroad lines more completely under one administration. To protect the public interests, however, the Board must require as a condition of its approval an understanding that the New York, New Haven and Hartford Railroad Company will comply with the laws of Massachusetts as to issues of stock and bonds whenever the proceeds of such issues are to be expended with reference to railroad construction or equipment within the state.

This requirement is made in the belief that these laws are a most effective safeguard against the evils of excessive capitalization and that they ought to be enforced to the full extent that the authority of the Board will permit.

The acceptance of this approval of the terms of the proposed consolidation will be deemed an assent upon the part of the railroad company to the condition upon which the approval is given.

For the Board,

JAMES F. JACKSON,

MARCH 13, 1907. [6096]

Chairman.

Petition of the Newton and the Waltham street railway companies for approval of terms of consolidation, and of the Newton Street Railway Company for authority to issue additional capital stock.

It appearing, after due notice and hearing, that the railways of the contracting companies connect; that the Waltham Street Railway Company is to transfer all its property and franchises to the Newton Street Railway Company, which is to assume all outstanding indebtedness and fulfil all obligations of the Waltham Street Railway Company; that the purchase and sale involves no decrease in facilities for travel and no increase in rates of fare, and is consistent with the public interests,—it is

Ordered, That the approval of the Board be hereby given to the terms of this contract of consolidation, a copy of which is on file in this office.

And it appearing that an increase in the capital stock of the

Newton Street Railway Company is reasonably requisite for the purpose of effecting an exchange of stock, share for share, as an incident of the proposed consolidation; and that an issue of this additional stock involves no increase in the aggregate amount of the capital stock and indebtedness of the contracting companies, — it is

Ordered, That the approval of the Board be hereby given to an increase in the capital stock of the Newton Street Railway Company by the issue of shares not exceeding one thousand (1000) in number amounting at par value to one hundred thousand dollars (\$100,000), the said shares to be issued for the purpose of carrying out the terms of said contract and in exchange, share for share, for the outstanding shares of the Waltham Street Railway Company, the certificates of the last named shares to be upon exchange surrendered and cancelled.

Attest:

CHARLES E. MANN,

OCTOBER 4, 1907.

[6668]

Clerk.

Petition of the Western Massachusetts and the Woronoco street railway companies for approval of terms of purchase and sale, and of the Western Massachusetts Street Railway Company for an increase in capital stock.

In considering the original cost of the Western Massachusetts street railway, the Board was convinced that the figures presented by the company were in excess of the amount which ought to stand as the capitalized cost of construction and therefore declined to approve the issue of the full amount of stock and bonds which the company had authorized. The proposed consolidation of this railway with the Woronoco street railway affords an opportunity for placing the cost of construction of the united properties upon a proper basis, and in compliance with the request of the Board the company has cancelled a large amount of outstanding indebtedness of the Western Massachusetts company as a step preliminary to the approval of the consolidation.

In view of this action and of the better administration of affairs to be secured without decrease in facilities for travel and without increase in rates of fare, — it is

Ordered, That the approval of the Board be hereby given to the terms of this contract of purchase and sale, a copy of which is upon file in this office.

And it appearing that an increase in the capital stock of the Western Massachusetts Street Railway Company is reasonably requisite for the purpose of effecting an exchange of stock, share for share; and that an issue of this additional stock involves no increase in the aggregate amount of the capital stock and indebtedness of these companies, — it is

Ordered, That the approval of the Board be hereby given to an increase in the capital stock of the Western Massachusetts Street Railway Company by the issue of shares not exceeding two thousand five hundred (2,500) in number, amounting at par value to two hundred fifty thousand dollars (\$250,000), the said shares to be issued for the purpose of carrying out the terms of said contract and in exchange, share for share, for the outstanding shares of the Woronoco Street Railway Company, the certificates of the last named shares to be upon exchange surrendered and cancelled.

For the Board,

JAMES F. JACKSON,
Chairman.

APRIL 26, 1907. [6388]

CERTIFICATE OF EXIGENCY.

Petitions of the Boston and Providence Interurban, the Boston and New York, the Boston, Lowell and Lawrence and the Boston and Eastern electric railroad companies for certificates under section 5, chapter 516, Acts of 1906.

R. M. SALTONSTALL }
HENRY ENDICOTT } Boston and Providence.

S. J. ELDER }
C. C. BLANEY } Boston and New York.

C. F. CHOATE }
F. H. NASH } Boston, Lowell and Lawrence.

MOORFIELD STOREY }
S. E. YOUNG } Boston and Eastern.

W. H. COOLIDGE, Boston and Maine.

B. W. WARREN, Boston and Northern.

C. S. SERGEANT, Boston Elevated.

S. L. POWERS, Lexington and Boston.

M. O. ADAMS, Boston, Revere Beach and Lynn.

F. D. ALLEN, Lynn Board of Trade, etc.

B. N. JOHNSON, Lynn remonstrants.

H. G. ALLEN, Lynn remonstrants.

F. V. MCCARTHY, Lynn remonstrants.

F. W. KAAAN, for city of Somerville.

C. C. NICHOLS, for city of Everett.

A. D. WADLEIGH, for city of Lynn.

H. W. JAMES, for city of Chelsea.

U. G. HASKELL, for city of Beverly.

The vigorous rivalry among four groups of promoters, each asking a special charter to authorize the building of an interurban electric railway between Boston and Providence, and the feeling that the time had come for general legislation with reference to such railways led to the passage in 1906 of the Electric Railroad Act under which these petitions are brought.

Owing to the close resemblance between the new electric and the old steam railroad the act provides that a company which

desires to build an electric railroad must first secure a certificate that public necessity and convenience require its construction. This had long been the law governing the building of new steam railroads.

In effect the statute declares that indiscriminate competition is undesirable, and that the resources of a monopoly, provided the management be efficient and progressive, may provide the largest and best public service; that established companies conducting their business in a proper manner are to be given a reasonable measure of protection; and that the extraordinary right of eminent domain is not to be exercised at the will of those who professing public purposes have in view merely private gain.

The question to be decided under each of these petitions is whether upon the whole the net results of a proposed undertaking promise public gain or public loss. It surely cannot be said that public necessity and convenience require the building of an additional railroad if the effect upon existing railroads is so disastrous that the service as a whole is impaired rather than improved.

Men keenly interested in the development of interurban railways have long had in mind an electric road between Boston and Providence. Though it must openly compete with an excellent steam railroad service it would offer equal speed with more frequent trains and with freedom from smoke and cinders. Physical conditions are favorable for an electric road of modern type, and as matters now stand it can not be said that the adventure would be unprofitable. Without exception cities and towns in this section welcome the new service and no similar accommodation is offered in connection with any existing lines. The question is simply which of the two companies that desire to build shall receive the necessary certificate, for it has been taken for granted from the first that there is room for only one.

The route of the Boston and Providence Interurban is the choice of experts who in the beginning had different lines in view. Their investigation has been exceptionally thorough and their plans have on the whole popular preference in the communities that would be served. This railway would connect existing street railways with a high speed main line, manifestly a great convenience to patrons. Home capital is largely interested in the road and the acquaintance of the men behind it with the conditions to be met would warrant the expectation of a high standard of service.

The route of the Boston and New York electric railroad is of recent suggestion. While this project, as the name indicates, is more ambitious than that of the Boston and Providence, its future

would be far more uncertain and speculative, success being dependent upon the ability of the company to prosecute the enterprise in other states where as yet nothing of a definite or tangible nature appears to have been accomplished.

In our opinion a certificate ought to be issued to the Boston and Providence Interurban Electric Railroad Company, as the company by comparison is in better position to make use of it for the public advantage.

The Boston, Lowell and Lawrence electric railroad as planned would pass through Charlestown, Somerville, Medford and Arlington, connecting with the Boston Elevated system in Charlestown. Residents of these cities and towns earnestly remonstrate against the building of this railroad. Though these remonstrants cannot rightfully set up their local interests as an impassable barrier to all new facilities for travel between Boston and more distant cities and towns, they may reasonably ask that their interests shall not be heedlessly overridden.

It cannot be gainsaid that the railroad which is proposed would interfere with important extensions of the Boston Elevated system which have long been awaited as a public blessing in these suburban towns. Are prospective benefits from the new enterprise such as to justify the sacrifice of those other public interests?

New freight facilities and low fares were prominent features of the prospectus of the Boston, Lowell and Lawrence electric railroad. The suggestion of better freight accommodation was attractive in Lowell and would explain much of the interest in the enterprise at first aroused in that quarter; but all intention of carrying on a freight business has since been disavowed. A five cent fare from any point in Arlington, Medford and Somerville to all parts of Boston was attractive in those communities and explains certain support secured in each; but it has since become evident that this assurance had no substantial basis. The freedom with which stations have been promised and the manner in which methods of operation have been explained challenge faith in the fulfilment of prophecies regarding train service. In general it may be said that the method pursued in placing this project before the public at different times and in different places in the early days of its promotion was notable for indifference to law and conditions and to the possibility that promises made might call for performance. Then, too, the structure which the company proposes in Sullivan square is undesirable and unsightly and the selection of that connection with the elevated system makes rapid transit

improbable and aggravates conditions that already vex and menace the public at this terminal. Nor can the company build the structure which it has planned without special legislation, and such legislation has been expressly denied.

Stripped of all the glamour given it by unsubstantial proclamations there is little in the enterprise to recommend it to the business judgment of investors or to give it standing with the public; too little to warrant the exercise of the right of eminent domain or the interference with other public works that the building of such a railway would involve. The standing and character of members of the temporary board of directors who were enlisted in the undertaking cannot be challenged and able counsel have endeavored to show substantial merit in what the company proposes to accomplish, but the more careful the study and the closer the scrutiny of the history and character of this transportation scheme the less there is found in it to call for a certificate that public necessity and convenience require it.

It does not follow from what has been said that there is no call for an electric railroad in the territory which lies to the north of Boston, and a carefully studied plan for such a railroad has been presented by the Boston and Eastern Electric Railroad Company. Existing railroad and railway companies have argued that they are now giving all needed facilities in this territory, but the argument falls short of the mark. It is true that the Boston, Revere Beach and Lynn railroad, within the limitations of a steam railroad hampered by ferry connection, is furnishing an admirable service to and from Lynn, and that much commendation is due the management of the Boston and Maine for a service along the North Shore that proves its interest in the comfort and convenience of patrons. But this is not the whole story. With all the railroad and railway lines that now serve it this densely populated territory, especially its rapidly growing cities, needs additional facilities both for immediate use and for the development of a commercial prosperity that might be realized were larger instrumentalities at hand.

As we have before stated in criticizing recent exasperating delays in the running of trains, it is apparent that railroad terminals, yards, tracks, rolling stock and motive power are today inadequate for the demands of traffic. With passengers and freight overtaking present accommodation there can be no doubt about the benefit that might be received from a quick and frequent electric service in this section of the state, a service distinctly different from any

now given upon railroad or street railway. If the Boston and Maine were making or were in a position to make immediate and extraordinary expenditure for track extension and new equipment to meet the situation and were ambitious to itself provide electric interurban trains we would agree that better things for the public could be secured through the enlargement of this service than through the wasteful expedient of inaugurating competitive enterprises. It is idle to argue, however, that in the present state of affairs the service given by steam railroads and street railways is supplying the transportation facilities upon which the commercial prosperity of this section of the state must depend for a wholesome existence and growth.

Of equal importance with the recognition of an opportunity is the selection of the right way to meet it. The plan of the Boston and Eastern electric railroad, though carefully studied, is not satisfactory in the way it provides for Lynn and is fatally defective at the Boston end of the undertaking in proposing a connection with the Boston Elevated railway at Sullivan square. That feature of the enterprise is absolutely prohibitive. The travel which now comes to Sullivan square as a connecting point between elevated and surface lines overloads the railway and the relief which is promised through changes soon to be completed cannot with our consent be endangered by conducting an additional tide of travel to this point.

The Legislature of 1906 in distinguishing the new electric railroad from other railroads and railways calls for a broad outlook on the part of those who make use of it and for the adoption of a far sighted policy that will not shrink from large outlays in bringing about the benefits that are possible under it. It would be a lamentable mistake to endorse an enterprise that fails to fully grasp the opportunity presented, and to permit the construction of a railroad which in a few years would probably be only a stumbling block in the way of carrying out larger plans for the public good.

In our opinion no electric railroad can successfully reach Boston from the north that does not secure an entrance to the city independent of the existing elevated structure in Charlestown. Without intending to define any exclusive route it may be suggested that the present tunnel or a second tunnel under the harbor might well be the connecting link.

Our conclusion is that, while public necessity and convenience call for enterprise in this field, the present route of the Boston

and Eastern electric railroad does not meet the emergency. Its petition, however, is not dismissed, but held to await further study and development of plans by this or by any other public agency desirous of furnishing additional transportation facilities in this territory.

JAMES F. JACKSON,
GEORGE W. BISHOP,
CLINTON WHITE,

SEPTEMBER 18, 1907. [6427-6318-6262-6258] *Commissioners.*

Boston and Providence Interurban Electric Railroad — Certificate.

After notice and hearing and further consideration, it is

Ordered, That the Board hereby certify that public convenience and necessity require the construction by the Boston and Providence Interurban Electric Railroad Company of an electric railroad as proposed in its agreement of association, beginning at a point at or near the terminus of the tracks of the Boston Elevated railway near the station of the New York, New Haven and Hartford Railroad Company at Forest Hills in the city of Boston, and extending in and through the city of Boston, the towns of Hyde Park, Dedham, Westwood, Norwood, Canton, Sharon, Foxboro, Mansfield, Attleborough and Seekonk to a point in the boundary line between Massachusetts and Rhode Island in said town of Seekonk, the route of said railway being shown upon plans filed by said petitioner in this office dated March 26, 1907, as amended by plan filed October 29, 1907.

Attest: CHARLES E. MANN,

NOVEMBER 19, 1907. [6427] *Clerk.*

RAILROAD EXPRESS.

Petitions of Timothy A. Moynihan for recommendation permitting him to engage in express business on trains between Boston and Hamilton, and of Barstow's Wakefield, Melrose and Boston Express for similar rights on trains between Boston and Melrose.

After careful investigation, the Board finds that in each instance existing express companies are giving reasonable service; that additional express matter on passenger trains is liable to cause greater delay and inconvenience; and therefore that the disadvantages overbalance any advantages that might accrue to the public.

The petitions are therefore dismissed.

For the Board,

CHARLES E. MANN,

DECEMBER 3, 1907.

[6354-6436]

Clerk.

STREET RAILWAY EXPRESS.

SPECIAL REPORT TO THE GENERAL COURT.

Special Report on an order passed in the House of Representatives of the General Court relative to Freight transportation by Boston Elevated railway.

To the Honorable the House of Representatives:

The Board of Railroad Commissioners herewith submits its reply to the several questions presented to it under the order of the House of Representatives dated March 11, 1907.

Special laws incorporating companies whose lines make up the West End street railway, now under lease to the Boston Elevated Railway Company, authorized the transportation of "property" as well as persons, but apparently there has been no attempt by the lessee or by the lessor or constituent companies to exercise such right through the conduct of a freight business.

The Boston Elevated Railway Company claims the right to transport coal and supplies over its lines for its own use, either as a necessary incident of the operation of the railway or under the authority which is given by the general law to all street railway companies to transport coal and supplies for such purpose.

Though the board of railroad commissioners has a general supervision over street railways it has been a policy of the legislature to leave with boards of aldermen and with selectmen the control over the manner in which street railway cars shall be operated through public streets. In consequence of the development of street railways from a local character, in which they served single communities, into interurban systems which serve many communities, statutes have been passed requiring that the action of town and city boards be subject to supervision by the state board in protection of public interests that extend beyond local boundaries. Accordingly the law which gave to boards of aldermen and to selectmen exclusive control over the number and routes of street cars and the manner and extent to which street car tracks should be used, has been changed to meet the new

conditions. Original authority is still preserved in the local boards, but its exercise has been made subject to the approval of the board of railroad commissioners.

The statute relating to the use of railway tracks by street sprinkling cars is an exception to the rule in giving to this Board an authority over the use of tracks by such cars within the limits of Boston independent of action by the board of aldermen.

In the opinion of the Board the original authority over the use of tracks in public streets is properly left with boards of aldermen and with selectmen subject to such state supervision as will protect interests which are of more than local concern. No legislation is therefore recommended with respect to the transportation of coal and supplies upon street railways, sufficient power to protect the public interests being now vested in the proper boards.

In exercising its general supervision over railways the Board relies upon the inquiries which it makes from time to time, upon the observation of its own members and that of its inspectors, and upon information received from other persons by way of suggestion or complaint.

In our opinion there is no need of an addition to the number of inspectors for the special purpose of enforcing the provisions of law respecting the transportation of coal or supplies over street railways.

For the Board,

JAMES F. JACKSON,

MARCH 20, 1907. [6507]

Chairman.

Petition of the Berkshire Street Railway Company for authority to act as common carrier of baggage and freight in Cheshire.

The petitioner has obtained from the selectmen of the town of Cheshire authority to conduct the business of a common carrier of newspapers, baggage, express matter and freight upon its railway within said town.

After notice and hearing, — it is

Ordered, That the Board hereby certify that public necessity and convenience require that the Berkshire Street Railway Company act as a common carrier upon the line of railway named in the order of the selectmen above described, to the extent of receiving, carrying and delivering such baggage and freight, described in the schedule on file with the petition, as is usually transported by ex-

press companies, restricted to exclude besides explosives all articles and commodities the transportation of which may be hereafter prohibited by the Board, upon the understanding that the facilities by which and the manner in which the business is conducted shall be subject to supervision and regulation by the Board from time to time as the public interests may require.

Attest: CHARLES E. MANN,
DECEMBER 6, 1907. [6777] Clerk.

Petition of the Blue Hill Street Railway Company for authority to act as common carrier of baggage and freight in Stoughton.

The petitioner has obtained from the selectmen of the town of Stoughton authority to conduct the business of a common carrier of baggage and freight upon its railway within that town.

After notice and hearing and upon full consideration, — it is

Ordered, That the Board hereby certify that public necessity and convenience require that the Blue Hill Street Railway Company act as a common carrier upon the lines of railway named in the order of the selectmen, to the extent of receiving, carrying and delivering baggage and freight of the kind described in the schedule on file with the petition, restricted to exclude besides explosives all articles and commodities the transportation of which may be hereafter prohibited by the Board.

This finding is made with the understanding that the facilities by which and the manner in which the business is conducted shall be subject to supervision and regulation by the Board from time to time as the public interests may require.

Attest: CHARLES E. MANN,
APRIL 9, 1907. [6508] Clerk.

Petition of the Boston and Worcester Street Railway Company for authority to act as common carrier of baggage and freight in the cities of Newton and Marlborough and in the towns of Wellesley, Natick, Framingham, Westborough, Shrewsbury, Northborough, Southborough and Hudson.

The petitioner has obtained from the boards of aldermen of the cities of Newton and Marlborough and from the selectmen of the

towns of Wellesley, Natick, Framingham, Westborough, Shrewsbury, Northborough, Southborough and Hudson authority to conduct the business of a common carrier of baggage and freight upon its railway within those cities and towns.

After notice and hearing, — it is

Ordered, That the Board hereby certify that public necessity and convenience require that the Boston and Worcester Street Railway Company act as a common carrier upon the lines of railway named in the orders of the boards of aldermen and of the selectmen, to the extent of receiving, carrying and delivering baggage and freight of the kind described in the schedule attached to the petition, restricted to exclude besides explosives all articles and commodities the transportation of which may be hereafter prohibited by the Board, upon the understanding that the facilities by which and the manner in which the business is conducted shall be subject to supervision and regulation by the Board from time to time as the public interests may require.

Attest:

CHARLES E. MANN,

FEBRUARY 27, 1907.

[6426]

Clerk.

Petition of the Brockton and Plymouth Street Railway Company for authority to act as common carrier of baggage and freight in Whitman, Hanson and Pembroke.

The petitioner has obtained from the selectmen of the towns of Whitman, Hanson and Pembroke authority to conduct the business of a common carrier of baggage and freight upon its railway within those towns.

After notice and hearing, — it is

Ordered, That the Board hereby certify that public necessity and convenience require that the Brockton and Plymouth Street Railway Company act as a common carrier upon the lines of railway named in the orders of the selectmen, to the extent of receiving, carrying and delivering baggage and freight of the kind described in the schedule on file with the petition, restricted to exclude besides explosives all articles and commodities the transportation of which may be hereafter prohibited by the Board, upon the understanding that the facilities by which and the manner in which the business is conducted shall be subject to supervision and regulation by the Board from time to time as the public interests may require.

Attest:

CHARLES E. MANN,

FEBRUARY 28, 1907.

[6460]

Clerk.

Petition of the Concord, Maynard and Hudson Street Railway Company for authority to act as common carrier of baggage and freight in the towns of Hudson, Stow, Maynard, Acton and Concord.

The petitioner has obtained from the selectmen of the towns of Hudson, Stow, Maynard, Acton and Concord authority to conduct the business of a common carrier of baggage and freight upon its railway within those towns.

After notice and hearing, — it is

Ordered, That the Board hereby certify that public necessity and convenience require that the Concord, Maynard and Hudson Street Railway Company act as a common carrier upon the lines of railway named in the orders of the selectmen above named, to the extent of receiving, carrying and delivering baggage and freight of the kind described in the schedule on file with the petition, restricted to exclude besides explosives all articles and commodities the transportation of which may be hereafter prohibited by the Board, upon the understanding that the facilities by which and the manner in which the business is conducted shall be subject to supervision and regulation by the Board from time to time as the public interests may require.

Attest: CHARLES E. MANN,

JUNE 7, 1907. [6577]

Clerk.

Petition of the Connecticut Valley Street Railway Company for authority to act as common carrier of baggage and freight in Deerfield, Whately and Hatfield.

The petitioner has obtained from the selectmen of the towns of Deerfield, Whately and Hatfield, authority to conduct the business of a common carrier of baggage and freight to a certain extent upon certain parts of its railway.

After notice and hearing and upon full consideration, no one appearing to remonstrate,

We hereby certify that public necessity and convenience require that the Connecticut Valley Street Railway Company act as a common carrier upon the parts of its railway in the towns of Deerfield, Whately and Hatfield named in the petition, to the extent of receiving, carrying and delivering baggage and freight of the kind described in the schedule on file with the petition, amended to exclude all explosives and to exclude all articles and commodities the transportation of which shall be hereafter prohibited by the Board.

This finding is made with the understanding and upon the condition that the facilities by which and the manner in which the business is conducted shall be subject to supervision and regulation by the Board as the public interests may from time to time require.

JAMES F. JACKSON,
GEORGE W. BISHOP,
CLINTON WHITE,

JANUARY 9, 1907. [6134]

Commissioners.

Petition of the Interstate Consolidated Street Railway Company for authority to act as common carrier of baggage and freight in the town of Attleborough.

The petitioner has obtained from the selectmen of the town of Attleborough authority to conduct the business of a common carrier of baggage and freight upon its railway within said town.

After notice and hearing, — it is

Ordered, That the Board hereby certify that public necessity and convenience require that the Interstate Consolidated Street Railway Company act as a common carrier upon the line of railway named in the order of the selectmen above named, to the extent of receiving, carrying and delivering such baggage and freight described in the schedule on file with the petition as is usually transported by express companies, restricted to exclude, besides explosives, all articles and commodities the transportation of which may be hereafter prohibited by the Board, upon the understanding that the facilities by which and the manner in which the business is conducted shall be subject to supervision and regulation by the Board from time to time as the public interests may require.

Attest:

ALLAN BROOKS,

AUGUST 21, 1907. [6660]

Assistant Clerk.

Petition of the Lexington and Boston Street Railway Company for authority to act as common carrier of baggage and freight in Concord.

The petitioner has obtained from the selectmen of the town of Concord authority to conduct the business of a common carrier of baggage and freight to a certain extent upon certain parts of its railway.

After notice and hearing and upon full consideration,

We hereby certify that public necessity and convenience require

that the Lexington and Boston Street Railway Company act as a common carrier upon the parts of its railway in the town of Concord named in the petition, to the extent of receiving, carrying and delivering baggage and freight of the kind described in the schedule on file with the petition, amended to exclude all explosives and to exclude all articles and commodities the transportation of which may be hereafter prohibited by the Board.

This finding is made with the understanding and upon the condition that the facilities by which and the manner in which the business is conducted shall be subject to supervision and regulation by the Board as the public interests may from time to time require.

JAMES F. JACKSON,
GEORGE W. BISHOP,
CLINTON WHITE,

JANUARY 30, 1907. [6365]

Commissioners.

*Petition of the Lexington and Boston Street Railway Company
for authority to act as common carrier of baggage and freight
in Waltham.*

The petitioner has obtained from the board of aldermen of the city of Waltham authority to conduct the business of a common carrier of baggage and freight upon its railway within that city.

After notice and hearing and upon full consideration,

We hereby certify that public necessity and convenience require that the Lexington and Boston Street Railway Company act as a common carrier upon the lines of railway named in the order of the board of aldermen, to the extent of receiving, carrying and delivering baggage and freight of the kind described in said order, restricted to exclude besides explosives all articles and commodities the transportation of which may be hereafter prohibited by the Board.

This finding is made with the understanding that the facilities by which and the manner in which the business is conducted shall be subject to supervision and regulation by the Board from time to time as the public interests may require.

JAMES F. JACKSON,
GEORGE W. BISHOP,
CLINTON WHITE,

FEBRUARY 13, 1907. [6447]

Commissioners.

Petition of the Middlesex and Boston Street Railway Company for authority to act as common carrier of baggage and freight in the town of Natick.

The petitioner has obtained from the selectmen of the town of Natick authority to conduct the business of a common carrier of baggage and freight upon its railway within said town.

After notice and hearing, — it is

Ordered, That the Board hereby certify that public necessity and convenience require that the Middlesex and Boston Street Railway Company act as a common carrier upon the line of railway named in the order of the selectmen above named, to the extent of receiving, carrying and delivering such baggage and freight described in the schedule on file with the petition as is usually transported by express companies, restricted to exclude besides explosives all articles and commodities the transportation of which may be hereafter prohibited by the Board, upon the understanding that the facilities by which and the manner in which the business is conducted shall be subject to supervision and regulation by the Board from time to time as the public interests may require.

Attest:

CHARLES E. MANN,

NOVEMBER 14, 1907.

[6780]

Clerk.

Petition of the Natick and Cochituate Street Railway Company for authority to act as common carrier of baggage and freight in the town of Natick.

The petitioner has obtained from the selectmen of the town of Natick authority to conduct the business of a common carrier of baggage and freight upon its railway within said town.

After notice and hearing, — it is

Ordered, That the Board hereby certify that public necessity and convenience require that the Natick and Cochituate Street Railway Company act as a common carrier upon the line of railway named in the order of the selectmen above named, to the extent of receiving, carrying and delivering such baggage and freight described in the schedule on file with the petition as is usually transported by express companies, restricted to exclude, besides explosives, all articles and commodities the transportation of which may be hereafter prohibited by the Board, upon the understanding that the facilities by which and the manner in which the business is

conducted shall be subject to supervision and regulation by the Board from time to time as the public interests may require.

OCTOBER 30, 1907. Attest: CHARLES E. MANN,
[6754] Clerk.

Petition of the Natick and Cochituate Street Railway Company for authority to act as common carrier of baggage and freight in the town of Wellesley.

The petitioner has obtained from the selectmen of the town of Wellesley authority to conduct the business of a common carrier of baggage and freight upon its railway within that town.

After notice and hearing, — it is

Ordered, That the Board hereby certify that public necessity and convenience require that the Natick and Cochituate Street Railway Company act as a common carrier upon the lines of railway named in the order of the selectmen above named, to the extent of receiving, carrying and delivering baggage and freight of the kind described in the schedule on file with the petition, restricted to exclude besides explosives all articles and commodities the transportation of which may be hereafter prohibited by the Board, upon the understanding that the facilities by which and the manner in which the business is conducted shall be subject to supervision and regulation by the Board from time to time as the public interests may require.

JUNE 21, 1907. Attest: CHARLES E. MANN,
[6445] Clerk.

Petition of the Newton Street Railway Company for authority to act as common carrier of baggage and freight in Watertown.

The petitioner has obtained from the selectmen of the town of Watertown authority to conduct the business of a common carrier of baggage and freight upon its railway within that town.

After notice and hearing and upon full consideration, — it is

Ordered, That the Board hereby certify that public necessity and convenience require that the Newton Street Railway Company act as a common carrier upon the lines of railway named in the order of the selectmen, to the extent of receiving, carrying, and delivering baggage and freight of the kind described in said order, restricted to exclude besides explosives all articles and commodities

the transportation of which may be hereafter prohibited by the Board.

This finding is made with the understanding that the facilities by which and the manner in which the business is conducted shall be subject to supervision and regulation by the Board from time to time as the public interests may require.

Attest: CHARLES E. MANN,
APRIL 9, 1907. [6511] *Clerk.*

Petition of the Newton Street Railway Company for authority to act as common carrier of baggage and freight in Waltham.

The petitioner has obtained from the board of aldermen of the city of Waltham authority to conduct the business of a common carrier of baggage and freight upon its railway within that city.

After notice and hearing and upon full consideration,

We hereby certify that public necessity and convenience require that the Newton Street Railway Company act as a common carrier upon the lines of railway named in the order of the board of aldermen, to the extent of receiving, carrying and delivering baggage and freight of the kind described in said order, restricted to exclude besides explosives all articles and commodities the transportation of which may be hereafter prohibited by the Board.

This finding is made with the understanding that the facilities by which and the manner in which the business is conducted shall be subject to supervision and regulation by the Board from time to time as the public interests may require.

JAMES F. JACKSON,
GEORGE W. BISHOP,
CLINTON WHITE,
FEBRUARY 13, 1907. [6448] *Commissioners.*

Petition of the Newton and Boston Street Railway Company for authority to act as common carrier of baggage and freight in Watertown.

The petitioner has obtained from the selectmen of the town of Watertown authority to conduct the business of a common carrier of baggage and freight upon its railway within that town.

After notice and hearing and upon full consideration, — it is

Ordered, That the Board hereby certify that public necessity and convenience require that the Newton and Boston Street Railway Company act as a common carrier upon the lines of railway named in the order of the selectmen, to the extent of receiving, carrying and delivering baggage and freight of the kind described in said order, restricted to exclude besides explosives all articles and commodities the transportation of which may be hereafter prohibited by the Board.

This finding is made with the understanding that the facilities by which and the manner in which the business is conducted shall be subject to supervision and regulation by the Board from time to time as the public interests may require.

Attest: CHARLES E. MANN,
APRIL 9, 1907. [6512] *Clerk.*

Petition of the Old Colony and the Union street railway companies for authority to act as common carriers of baggage and freight in Lakeville, Freetown and New Bedford.

The Old Colony Street Railway Company has obtained from the selectmen of the towns of Lakeville and Freetown and from the board of aldermen of the city of New Bedford, and the Union Street Railway Company from the board of aldermen of the city of New Bedford, authority to conduct the business of common carriers of baggage and freight upon their railways.

After notice and hearing, — it is

Ordered, That the Board hereby certify that public necessity and convenience require that the Old Colony Street Railway Company and the Union Street Railway Company act as common carriers upon the lines of railway named in the orders of the selectmen and of the board of aldermen above named, to the extent of receiving, carrying and delivering baggage and freight of the kind described in the schedule attached to the petition, restricted to exclude besides explosives all articles and commodities the transportation of which may be hereafter prohibited by the Board; upon the understanding that the facilities by which and the manner in which the business is conducted shall be subject to supervision and regulation by the Board from time to time as the public interests may require.

Attest: CHARLES E. MANN,
APRIL 27, 1907. [6422] *Clerk.*

Petition of the Old Colony Street Railway Company for authority to act as a common carrier of baggage and freight in Fall River.

It appearing, after notice and hearing, held under the provisions of chapter 402 of the Acts of 1907, that the Old Colony Street Railway Company is authorized to act as a common carrier of newspapers, baggage, express matter and freight in towns adjoining Fall River; that it has heretofore filed with the aldermen of said city a petition for approval of the right to act as common carrier in said city; and the aldermen having failed to act on said petition within sixty days of the filing thereof, and the Board being of the opinion that the rights petitioned for ought to be granted, — it is

Ordered, That the Board hereby certify that public convenience and necessity require the granting of this petition and therefore that the old Colony Street Railway Company be required to act as a common carrier upon the lines of its railway in Fall River, to the extent of receiving, carrying and delivering such baggage and freight, described in the schedule on file with the petition, as is usually transported by express companies, restricted to exclude besides explosives all articles and commodities the transportation of which may be hereafter prohibited by the Board.

This order is made subject to the following regulations and restrictions:

1. The company shall receive and deliver baggage, express and freight at suitable places or stations, and without discrimination or favor to any person or corporation.

2. All baggage, express and freight shall be transported in suitable cars to be provided with proper fenders, brakes and safety appliances, and to be run at no time at a higher rate of speed than that at which the company operates passenger cars.

3. The exercise of the authority herein granted shall in no way alter or abridge the duties and obligations of the company relative to the transportation of passengers, nor in any way interfere with the conduct of the passenger service.

4. The company shall be subject to such further regulations and restrictions as shall be lawfully made from time to time.

5. The authority herein granted is given upon the express condition that it shall not operate in any way to enhance the value

of the assets of the company in the event of a purchase of the railway property by the city or state.

For the Board,

CHARLES E. MANN,

DECEMBER 14, 1907. [6781]

Clerk.

Petition of the Old Colony Street Railway Company for authority to act as a common carrier of baggage and freight in Quincy.

B. W. WARREN }
I. M. GARFIELD } for company.
W. R. THOMAS for city.

Chapter 402, of the Acts of 1907, under which this proceeding is brought, was enacted for the purpose of protecting the general public interests against local indifference or prejudice.

In this instance the city council of Quincy has denied the street railway company the right to do an express and freight business upon a line which passes for a short distance over the state highway in a part of that city that is not occupied for either residential or business purposes.

No suggestion is made that the exercise of such a privilege would in any way affect individual or public interests, and it is plain that the right to carry baggage and freight over this line would be of decided benefit to the people of other cities and towns.

The company is ready to submit to all proper regulations and restrictions and it is difficult to conceive of a more extreme case of local indifference to the general interests of neighboring communities.

The Board is of the opinion that public necessity and convenience require the granting of this petition, and therefore requires the Old Colony Street Railway Company to act as a common carrier of newspapers, baggage, express matter and freight upon that line of railway which extends from the boundary line between Randolph and Quincy along Randolph avenue to the boundary line between Milton and Quincy, to the extent of receiving, carrying and delivering such baggage and freight as is described in the schedule on file with this petition, and as is usually transported by express companies.

Sanctified

This order excludes the right to transport explosives, or any articles or commodities the carriage of which may be hereafter prohibited by the Board and is made subject to the following regulations and restrictions:

1. The company shall receive and deliver baggage, express and freight at suitable places or stations, and without discrimination or favor to any person or corporation.

2. All baggage, express and freight shall be transported in suitable cars to be provided with proper fenders, brakes and safety appliances, and to be run at no time at a higher rate of speed than that at which the company operates passenger cars.

3. The exercise of the authority herein granted shall in no way alter or abridge the duties and obligations of the company relative to the transportation of passengers, nor in any way interfere with the conduct of the passenger service.

4. The company shall be subject to such further regulations and restrictions as shall be lawfully made from time to time.

5. The authority herein granted is given upon the express condition that it shall not operate in any way to enhance the value of the assets of the company in the event of a purchase of the railway property by the city or state.

For the Board,

JAMES F. JACKSON,

NOVEMBER 9, 1907. [6735]

Chairman.

Petition of the Old Colony Street Railway Company for authority to act as common carrier of baggage and freight in Milton, Randolph, Avon, Braintree and Holbrook.

The petitioner has obtained from the selectmen of the towns of Milton, Randolph, Avon, Braintree and Holbrook authority to conduct the business of a common carrier of newspapers, baggage, express matter and freight upon its railway within said towns.

After notice and hearing, — it is

Ordered, That the Board hereby certify that public necessity and convenience require that the Old Colony Street Railway Company act as a common carrier upon the lines of railway named in the orders of the selectmen above named, to the extent of receiving, carrying and delivering such baggage and freight, described in the schedule on file with the petition, as is usually transported by express companies, restricted to exclude besides explosives all articles

and commodities the transportation of which may be hereafter prohibited by the Board, upon the understanding that the facilities by which and the manner in which the business is conducted shall be subject to supervision and regulation by the Board from time to time as the public interests may require.

Attest: CHARLES E. MANN,
[6814] Clerk.

DECEMBER 6, 1907.

Petition of the Old Colony Street Railway Company for authority to act as a common carrier of baggage and freight in West Bridgewater.

It appearing, after notice and hearing, held under the provisions of chapter 402 of the Acts of 1907, that the Old Colony Street Railway Company is authorized to act as a common carrier of newspapers, baggage, express matter and freight in towns adjoining West Bridgewater; that it has heretofore filed with the selectmen of said town a petition for approval of the right to act as common carrier in said town; and the selectmen having failed to act on said petition within sixty days of the filing thereof, and the Board being of the opinion that the rights petitioned for ought to be granted, — it is

Ordered, That the Board hereby certify that public convenience and necessity require the granting of this petition, and therefore that the Old Colony Street Railway Company be required to act as a common carrier upon the lines of its railway in West Bridgewater, to the extent of receiving, carrying and delivering such baggage and freight, described in the schedule on file with the petition, as is usually transported by express companies, restricted to exclude besides explosives all articles and commodities the transportation of which may be hereafter prohibited by the Board.

This order is made subject to the following regulations and restrictions:

1. The company shall receive and deliver baggage, express and freight at suitable places or stations, and without discrimination or favor to any person or corporation.

2. All baggage, express and freight shall be transported in suitable cars to be provided with proper fenders, brakes and safety appliances, and to be run at no time at a higher rate of speed than that at which the company operates passenger cars.

3. The exercise of the authority herein granted shall in no way alter or abridge the duties and obligations of the company relative

to the transportation of passengers, nor in any way interfere with the conduct of the passenger service.

4. The company shall be subject to such further regulations and restrictions as shall be lawfully made from time to time.

5. The authority herein granted is given upon the express condition that it shall not operate in any way to enhance the value of the assets of the company in the event of a purchase of the railway property by the city or state.

For the Board,

CHARLES E. MANN,

DECEMBER 14, 1907. [6815]

Clerk.

Petition of the South Middlesex Street Railway Company for authority to act as common carrier of baggage and freight in Hopkinton, Ashland and Sherborn.

The petitioner has obtained from the selectmen of the towns of Hopkinton, Ashland and Sherborn authority to conduct the business of a common carrier of baggage and freight to a certain extent upon certain parts of its railway.

After notice and hearing and upon full consideration, no one appearing to remonstrate,

We hereby certify that public necessity and convenience require that the South Middlesex Street Railway Company act as a common carrier upon the parts of its railway in the towns of Hopkinton, Ashland and Sherborn named in the petition, to the extent of receiving, carrying and delivering baggage and freight of the kind described in the schedule on file with the petition, amended to exclude all explosives and to exclude all articles and commodities the transportation of which shall be hereafter prohibited by the Board.

This finding is made with the understanding and upon the condition that the facilities by which and the manner in which the business is conducted shall be subject to supervision and regulation by the Board as the public interests may from time to time require.

JAMES F. JACKSON,
GEORGE W. BISHOP,
CLINTON WHITE,

JANUARY 29, 1907. [6376]

Commissioners.

*Petition of the Springfield and Eastern Street Railway Company
for authority to act as common carrier of baggage and freight
in Brimfield.*

The petitioner has obtained from the selectmen of the town of Brimfield authority to conduct the business of a common carrier of newspapers, baggage, express matter and freight upon its railway within said town.

After notice and hearing, — it is

Ordered, That the Board hereby certify that public necessity and convenience require that the Springfield and Eastern Street Railway Company act as a common carrier upon the line of railway named in the order of the selectmen above described, to the extent of receiving, carrying and delivering such baggage and freight, described in the schedule on file with the petition, as is usually transported by express companies, restricted to exclude besides explosives all articles and commodities the transportation of which may be hereafter prohibited by the Board, upon the understanding that the facilities by which and the manner in which the business is conducted shall be subject to supervision and regulation by the Board from time to time as the public interests may require.

Attest: CHARLES E. MANN,

DECEMBER 6, 1907.

[6791]

Clerk.

*Petition of the Waltham Street Railway Company for authority to
act as common carrier of baggage and freight in Waltham.*

The petitioner has obtained from the board of aldermen of the city of Waltham authority to conduct the business of a common carrier of baggage and freight upon its railway within that city.

After notice and hearing and upon full consideration,

We hereby certify that public necessity and convenience require that the Waltham Street Railway Company act as a common carrier upon the lines of railway named in the order of the board of aldermen, to the extent of receiving, carrying and delivering baggage and freight of the kind described in said order, restricted to exclude besides explosives all articles and commodities the transportation of which may be hereafter prohibited by the Board.

This finding is made with the understanding that the facilities by which and the manner in which the business is conducted shall

be subject to supervision and regulation by the Board from time to time as the public interests may require.

JAMES F. JACKSON,
GEORGE W. BISHOP,
CLINTON WHITE,

FEBRUARY 13, 1907. [6446]

Commissioners.

Petitions of the Westborough and Hopkinton Street Railway Company for authority to act as common carrier of baggage and freight in Westborough and Hopkinton.

The petitioner has obtained from the selectmen of the towns of Westborough and Hopkinton authority to conduct the business of a common carrier of baggage and freight upon its railway within those towns.

After notice and hearing and upon full consideration,

We hereby certify that public necessity and convenience require that the Westborough and Hopkinton Street Railway Company act as a common carrier upon the lines of railway named in the orders of the selectmen, to the extent of receiving, carrying and delivering baggage and freight of the kind described in the schedule on file with the petitions, restricted to exclude besides explosives all articles and commodities the transportation of which may be hereafter prohibited by the Board.

This finding is made with the understanding that the facilities by which and the manner in which the business is conducted shall be subject to supervision and regulation by the Board from time to time as the public interests may require.

JAMES F. JACKSON,
GEORGE W. BISHOP,
CLINTON WHITE,

FEBRUARY 15, 1907. [6364]

Commissioners.

EXTENSION OF FRANCHISE.

Petition of the Pittsfield Electric Street Railway Company for authority to extend its railway into the town of Hancock.

It appearing, after notice and hearing, that the petitioner is maintaining and operating a street railway in the city of Pittsfield; that the extension of its railway into the adjoining town of Hancock may promote the convenience of public travel and is consistent with the public interests, — it is

Ordered, That the Board hereby certify that public convenience requires that authority be granted to the Pittsfield Electric Street Railway Company to extend its railway into the town of Hancock, subject to the provisions of law relating to the location, construction and operation of street railways.

OCTOBER 14, 1907.

Attest:
[6734]

CHARLES E. MANN,
Clerk.

FENDERS AND WHEELGUARDS.

CIRCULAR TO STREET RAILWAY COMPANIES.

In its annual report of 1904 the Board expressed a lack of confidence in the car fenders and wheelguards then in use upon our street railways and advised experiment with new types. While companies gave some attention to this suggestion during the year that followed, there was manifest on the whole a general indisposition toward any change in equipment. The Board then took up the matter, and having secured an appropriation from the Legislature of 1906 completed in December last an investigation of fenders and wheelguards at home and abroad, concluding the inquiry with a series of tests in Newton. Companies were thereupon requested to give notice to the Board, on or before the first day of this month, of their preferences in respect to these safeguards. That time, subsequently extended two weeks, having now expired, the Board issues the following statement of views and requirements.

Pfingst Fender.

In 1895, after an exhaustive inquiry, the then members of this Board issued a circular stating their conclusions and defining the general principles which should govern the equipment of street cars with safety devices. Although the Pfingst fender was not recommended as better than others, it was one of a class of fenders which under this circular companies could use and was the one which they very generally selected.

As stated in our last report, "The record of the Pfingst fender shows many instances when persons have been saved from injury. This of course happens when accidents are prevented and therefore when public attention is not drawn to the fact through newspaper paragraph, police report or inquest. On the other hand, this fender has frequently failed to do its work. Upon a large percentage of the surface cars in Boston the fender is useless from the fact that projecting parts of the car so reduce the available area of the platform as to leave no room for catching or holding a person who falls or is thrown upon it."

Notwithstanding the multiplication of patents and the ingenuity of experts we know of no device in use or exhibited through sketch or model that, attached to a street car moving at varying speed can be relied upon to always trip a standing person or pick up a prostrate body without injury. It must remain unsafe for young children to play in streets that are occupied by railway tracks, or to cross them unattended, and unsafe for older persons to step carelessly in front of cars. Meanwhile there is need of more effective car fenders and wheelguards. Although applications for the most part call for a further endorsement of the Pfingst fender, we do not share the confidence expressed in it and cannot approve it to the exclusion of other devices.

Automatic Safeguards.

The newer devices are as a rule automatic. In passing upon them it is necessary to bear in mind the distinguishing characteristics of the service upon various lines of railway. For example, we believe it would be hazardous to attach to the front ends of high speed interurban cars, operated under the conditions commonly met, automatic fenders which might upon occasion so fall or be thrown in the way of the car as to cause a derailment. On the other hand, there would be no such hazard in the use of an automatic wheelguard upon cars as ordinarily operated in city streets. The Board will therefore require an experiment with these wheelguards though at times in winter snow and ice will undoubtedly interfere with their success.

Drop Devices.

A fender or wheelguard that must be dropped by the motorman in case of threatened accident is open to the criticism that it complicates his duties at a time when he ought to give paramount attention to the stopping of the car. On the other hand, this device possesses an advantage over the automatic in that it is dropped only when needed and by intelligent action and so can be carried at a height such as to eliminate risks from contact with obstructions. A very important change in this type of fender or wheelguard is that by which the application of the emergency brake itself drops it into position. A trial of these devices will also be required.

Liverpool Lifeguard.

Climate and roadbed make it possible in Liverpool to use a guard which is carried so close to the surface of the track as to be very successful in its one purpose of preventing bodies from passing

under the wheels. While weather and roadbed construction prohibit upon many of our railways the use of a guard carried so close to the ground, wheelguards have been brought to our notice which possess some of the features of the Liverpool device and which are apparently capable of good work. The Board will require the use of these wheelguards upon selected cars.

Rigid Fenders.

Rigid devices projecting in front of cars are suited to the conditions upon some of our railways but this type ought not to be confined to the straight platform fender. Whenever any such fender is hereafter used it must be attached to the car at a height of not less than twelve inches above the track so that it will pass over a prostrate body without maiming or injury. Among fenders of this type are several designed to make it sure that a person tripped and falling upon them will remain there until the car is stopped. Lines of cars will be specified upon which these devices are to be used.

Conclusion.

It is the purpose of the Board in the enforcement of these views to secure actual experience with different types of fenders and wheelguards that promise results better than those attained in the past.

Companies must complete designated changes in equipment on or before the first day of December, 1907, unless prevented by reasons beyond their control, in which case the necessary additional time will be allowed.

The details of the new equipment will be taken up with the Boston Elevated, the Boston and Worcester, the Boston and Northern and Old Colony, and with the Worcester, Springfield and Berkshire systems on Monday, the twenty-seventh day of May, at half-past ten o'clock, and with other companies at a time to be hereafter named.

The plan of action proposed in this circular is of course subject to any change which may be rendered necessary should the Legislature in the measure now pending before it restrict the power of the Board.

JAMES F. JACKSON,
GEORGE W. BISHOP,
CLINTON WHITE,

MAY 21, 1907. [6450]

Commissioners.

FIRE EXTINGUISHERS.

FIRE EXTINGUISHERS UPON RAILROAD TRAINS.

Petitions of operating railroad corporations for approval of fire extinguishing apparatus for use on cars.

Acting under the authority given by chapter 283, Acts of the Legislature of 1906, the Board recently notified the companies operating railroads within the state to severally present for approval on or before the first day of May, 1907, the type of fire extinguishing apparatus which they deemed most efficient for use upon cars.

Conformably to this requirement application has been made for the approval of five different types of fire extinguishing apparatus, the New York, New Haven and Hartford company, the Hoosac Tunnel and Wilmington company and the Central Vermont company asking approval of liquid extinguishers, and the Boston and Maine and the New York Central and Hudson River companies asking approval of different kinds of dry powder extinguishers.

At the hearings given to persons interested in different types of fire extinguishing apparatus it was generally asserted by those who exhibited devices, whether for use with dry powder or with liquid, that no liquid mixture for use in putting out fires had yet been found which would not freeze when subjected to low temperature. Notwithstanding this assertion recent tests made under the direction of the Board would seem to show that there are now in the market non-freezable liquids for use in extinguishing fire.

In the belief that a liquid is likely to give on the whole better results than a dry powder and that therefore a practical trial of these devices should be made, the Board must require that not less than one hundred cars upon the Boston and Maine and one hundred cars upon the Boston and Albany railroad, of the class named in the statute, be each provided with some form of liquid fire extinguishing apparatus of at least a three gallon capacity, all other passenger, baggage, mail and express cars regularly used within the state and upon these railroads to be provided with the device for which approval is asked.

As the fire extinguisher presented by the New York, New Haven and Hartford and by the Hoosac Tunnel and Wilmington companies are both of the liquid type and of such character as makes it advisable that a thorough test should be made with them their use is hereby approved, with the requirement that every passenger, baggage, mail and express car regularly used on these railroads shall be equipped with an extinguisher having at least a three gallon capacity.

The Central Vermont company has asked approval of a liquid extinguisher but of a kind and capacity not believed to be suitable, and the Board therefore requires that company to equip the passenger, baggage, mail and express cars regularly used upon its railroad in this state with some suitable form of liquid extinguisher having at least a three gallon capacity.

The Boston, Revere Beach and Lynn company asks to be exempted from any requirement as to these safeguards and offers what it claims to be exceptional conditions as a ground for such exemption. The Board is of the opinion, however, that no exemption ought to be made, and it therefore requires the company to equip every combination car in use upon this railroad with two liquid fire extinguishers having at least a three gallon capacity, and all other passenger cars in use upon this railroad with some form of dry powder extinguisher.

Companies are given until the first day of October next within which to complete the equipment herein named.

In view of the diverse criticism, favorable and unfavorable, to which every form of device exhibited has been subject in the course of this investigation, companies are asked to report at the end of one year the results of their experience with the different extinguishers which have been brought into use under this order.

JAMES F. JACKSON,
GEORGE W. BISHOP,
CLINTON WHITE,

MAY 15, 1907. [6542]

Commissioners.

GRADE CROSSINGS.

RAILROAD CROSSING.

Petition of the selectmen for consent to the laying out of a highway across the Chester and Becket railroad in the town of Becket.

The highway which it is proposed to locate and construct at grade across the railroad in Becket would create a situation which might prove a menace to the safety of the travelling public; while investigation shows that at a slight additional expense an overhead crossing could be constructed but a short distance away.

We must therefore withhold our consent to this crossing.

For the Board,

CHARLES E. MANN,

DECEMBER 7, 1907. [6466]

Clerk.

RAILROAD AND RAILWAY CROSSINGS.

Petition of the New Bedford and Onset Street Railway Company for an extension of time for maintaining grade crossing of railroad and railway in Bourne.

It appearing, after notice and hearing, that the conditions existing where Bridge street crosses the New York, New Haven and Hartford railroad in the town of Bourne justify an extension of the time for maintaining the temporary crossing of railroad and railway at the same level, — it is

Ordered, That the period during which the crossing of the Middleborough, Wareham and Buzzards Bay street railway (now the New Bedford and Onset street railway) and the New York, New Haven and Hartford railroad at the same level in Bridge street in Bourne was sanctioned under the order of this Board dated May 8, 1902, be hereby further extended to January 1, 1909.

Attest:

CHARLES E. MANN,

DECEMBER 12, 1907. [6819]

Clerk.

Petition of the Boston and Northern Street Railway Company for consent to grade crossing of the Boston and Maine railroad on Middlesex street in the city of Lowell.

It appearing, after due notice and hearing that the petitioner has been granted a location for a second track upon Middlesex street in Lowell across the Boston and Maine railroad at a point where an existing track already crosses such railroad, — it is

Ordered, That the consent of the Board be hereby given to the construction and maintenance by the petitioner of the above described track across the railroad at the same level therewith at the place named as shown upon a plan on file in this office, under the following conditions and subject to the following regulations:

1. The crossing shall be constructed and maintained by the street railway company in a manner satisfactory to the railroad company, or, if they do not agree, in such manner as shall be prescribed by this Board.

2. The street railway company shall maintain at said crossing during all that portion of the day and night within which it runs cars across the railroad a competent man whose sole business shall be to see that the crossing and the overhead construction are in good repair, to keep informed of the running time of trains and to give warning of any approaching engine, car or train. No street car shall cross the railroad except when and as he shall direct.

3. This order is subject to change or revocation at any time.

Attest: CHARLES E. MANN,

APRIL 23, 1907. [6437]

Clerk.

Petition of the Boston and Worcester Street Railway Company for extension of time for maintaining grade crossing of railway and railroad in Framingham.

It appearing, after notice and hearing, that the conditions existing in the town of Framingham where Worcester street crosses the New York, New Haven and Hartford railroad justify a further extension of the time for maintaining the crossing of railroad and railway at the same level, — it is

Ordered, That the period during which the crossing of the Framingham, Southborough and Marlborough street railway (now part of the Boston and Worcester street railway) and the New York, New Haven and Hartford railroad at the same level in

Worcester street in Framingham was sanctioned under the order of the Board dated February 28, 1899, be hereby further extended to March 1, 1909.

Attest: CHARLES E. MANN,
FEBRUARY 15, 1907. [6476] Clerk.

Petition of the Concord, Maynard and Hudson Street Railway Company for extension of time for maintaining grade crossing of railway and railroad in Maynard.

It appearing, after consideration, that the conditions existing in the town of Maynard where the highway crosses the Marlborough branch of the Fitchburg railroad (Boston and Maine Railroad, lessee) justify an extension of the time for maintaining the crossing of railroad and railway at the same level, — it is

Ordered, That the period during which the petitioner was authorized to maintain a crossing of its railway and the railroad at the same level in Maynard, under the order of the Board dated July 23, 1901, be further extended to the first day of January, 1910.

Attest: CHARLES E. MANN,
JUNE 11, 1907. [6583] Clerk.

Petition of the Berkshire Street Railway Company for extension of time for maintaining grade crossing of railway and railroad in Pittsfield.

It appearing, after notice and hearing, that the conditions existing in the city of Pittsfield where the highway known as Dalton road crosses the North Adams branch of the Boston and Albany railroad justify an extension of the time for maintaining the crossing of railroad and railway at the same level, — it is

Ordered, That the period during which the petitioner was authorized to maintain a crossing of its railway and the railroad at the same level at Dalton road in Pittsfield, under the order of the Board dated May 22, 1902, be hereby further extended to the first day of January, 1910.

Attest: CHARLES E. MANN,
DECEMBER 23, 1907. [6809] Clerk.

Petition of the Lowell and Fitchburg Street Railway Company for consent to emergency crossing over the Boston and Maine railroad in Westford.

To provide for the emergencies named in the agreement signed by the Boston and Maine Railroad and the Lowell and Fitchburg Street Railway Company under date of January 10, 1907, a copy of which agreement accompanies the petition, — it is

Ordered, That the consent of the Board be hereby given to the construction and maintenance of the Lowell and Fitchburg street railway across the Boston and Maine railroad at Brookside in Westford, at the same level therewith, as shown upon the plan accompanying the petition, for the special purposes and under the restrictions described in the agreement hereinbefore named, and upon the following conditions:

1. No car shall be allowed to cross the railroad premises for any purpose or in any way other than that prescribed in the agreement between the two companies.

2. This consent shall be in force until otherwise ordered, but may be revoked without hearing whenever the public interests may be deemed to demand such action.

Attest: ALLAN BROOKS,

MARCH 12, 1907. [6470]

Assistant Clerk.

Petition of the West End Street Railway Company for extension of time for maintaining grade crossing of railway and railroad in Neponset avenue in Boston.

It appearing, after notice and hearing, that the conditions existing in Neponset avenue in Boston, where said highway crosses the tracks of the New York, New Haven and Hartford railroad, justify an extension of the time for maintaining the crossing of railroad and railway at the same level, — it is

Ordered, That the period during which the petitioner was authorized to maintain a crossing of its railway and the railroad at the same level in Neponset avenue in Boston, under the order of the Board dated November 5, 1903, be extended to the first day of October, 1909.

Attest: CHARLES E. MANN,

OCTOBER 7, 1907. [6730]

Clerk.

PRIVATE RAILROADS.

Petition of the New England Maple Syrup Company, the Ashton Valve Company, the Carter's Ink Company, Ginn and Company, and Henry M. Whitney for consent to the construction and maintenance of a railroad for private use in the transportation of freight across certain highways in Cambridge.

It appearing that the board of aldermen of the city of Cambridge has consented to the construction and maintenance of the proposed railroad across the highways; that the county commissioners of Middlesex County have adjudged that public necessity requires that the railroad cross the highways at a level therewith; and that the same is consistent with the public interests, — it is

Ordered, That the consent of the Board be hereby given to the construction and maintenance by the petitioners of a railroad for private use in the transportation of freight, to be operated by steam power upon and across the highways known as Ninth, Sixth, Fifth, Third and Second streets at their junction with Binney street; also Binney street near its junction with Second street, Munroe street at its junction with Second street, Second street near its junction with Munroe street and with Athenæum street, and Athenæum street near its junction with Second street, in the city of Cambridge, as shown upon a plan on file in this office.

This consent is given upon the condition that a flagman shall display a flag by day and a lantern by night whenever an engine, car or train is approaching and while it is passing over said crossings, and that no engine, car or train shall cross at a greater speed than four miles an hour.

Attest:

CHARLES E. MANN,

SEPTEMBER 9, 1907.

[6692]

Clerk.

Petition of the Blake and Knowles Steam Pump Works for consent to the construction and maintenance of a railroad for private use in the transportation of freight across a highway in Cambridge.

It appearing that the board of aldermen of the city of Cambridge has consented to the construction and maintenance of the proposed railroad across the highway; that the county commissioners of Middlesex county have adjudged that public necessity requires that the railroad cross the highway at a level therewith; and that the same is consistent with the public interests, — it is

Ordered, That the consent of the Board be hereby given to the construction and maintenance by the petitioner of a railroad for private use in the transportation of freight, to be operated by steam power upon and across the highway known as Sixth street in Cambridge, as shown upon a plan on file in this office.

This consent is given upon the condition that a flagman shall display a flag by day and a lantern by night whenever an engine, car or train is approaching and while it is passing over said crossing, and that no engine, car or train shall cross at a greater speed than four miles an hour.

Attest: CHARLES E. MANN,
NOVEMBER 6, 1907. [6786] Clerk.

Petition of the Revere Sugar Refinery for consent to the construction and maintenance of a railroad for private use in the transportation of freight across a highway in Cambridge.

It appearing that the board of aldermen of the city of Cambridge has consented to the construction and maintenance of the proposed railroad across the highway; that the county commissioners of Middlesex county have adjudged that public necessity requires that the railroad cross the highway at a level therewith; and that the same is consistent with the public interests, — it is

Ordered, That the consent of the Board be hereby given to the construction and maintenance by the petitioner of a railroad for private use in the transportation of freight, to be operated by steam power upon and across the highway known as Water street in East Cambridge, as shown upon a plan on file in this office.

This consent is given upon the condition that the gates crossing Water street at this point shall be moved so as to include these tracks and operated in connection with them, and that no engine, car or train shall cross at a greater speed than four miles an hour.

Attest: CHARLES E. MANN,
OCTOBER 23, 1907. [6762] Clerk.

Petition of the Fitchburg Yarn Company for consent to the construction and maintenance of a railroad for private use in the transportation of freight across a highway in Fitchburg.

It appearing that the board of aldermen of the city of Fitchburg has consented to the construction and maintenance of the pro-

posed railroad across the highway; that the county commissioners of Worcester county have adjudged that public necessity requires that the railroad cross the highway at a level therewith; and that the same is consistent with the public interests, — it is

Ordered, That the consent of the Board be hereby given to the construction and maintenance by the petitioner of a railroad, for private use in the transportation of freight, to be operated by steam power upon and across the highway known as Sheldon street, as shown upon a plan on file in this office.

This consent is given upon the condition that a flagman shall display a flag by day and a lantern by night whenever an engine, car or train is approaching and while it is passing over said crossing, and that no engine, car or train shall cross at a greater speed than four miles an hour.

Attest: CHARLES E. MANN,

MARCH 2, 1907. [6494]

Clerk.

Petition of Fore River Shipbuilding Company for extension of time for maintaining private freight tracks across highways at grade.

Under an order of the Board issued May 6, 1903, the Fore River Ship and Engine Company, predecessor of the petitioner, was authorized to construct and maintain a private freight track across certain public highways in Quincy and Braintree, for a period expiring September 1, 1905. On July 6, 1905, authority was given for an extension of this period for two years ending September 1, 1907, and the petitioner now asks for a further extension.

After public notice and hearing, and for good reasons shown, — it is

Ordered, That the period within which these crossings may be maintained be extended from September 1, 1907 to September 1, 1908.

Attest: ALLAN BROOKS,

AUGUST 21, 1907. [6670]

Assistant Clerk.

Petition of the Norwood Engineering Company for consent to the construction and maintenance of a railroad for private use in the transportation of freight across a highway in Florence.

It appearing that the board of aldermen of the city of Northampton has consented to the construction and maintenance of the

proposed railroad across the highway; that the county commissioners of Hampshire county have adjudged that public necessity requires that the railroad cross the highway at a level therewith; and that the same is consistent with the public interests, — it is

Ordered, That the consent of the Board be hereby given to the construction and maintenance by the petitioner of a railroad for private use in the transportation of freight, to be operated by steam power upon and across the highway known as Maple street in the village of Florence, as shown upon a plan on file in this office.

This consent is given upon the condition that a flagman shall display a flag by day and a lantern by night whenever an engine, car or train is approaching and while it is passing over said crossing, and that no engine, car or train shall cross at a greater speed than four miles an hour.

Attest: CHARLES E. MANN,
JULY 22, 1907. [6627] Clerk.

Petition of the Hamilton Manufacturing Company for consent to the construction and maintenance of a railroad for private use in the transportation of freight across a highway in Lowell.

It appearing that the board of aldermen of the city of Lowell has consented to the construction and maintenance of the proposed railroad across the highway; that the county commissioners of Middlesex county have adjudged that public necessity requires that the railroad cross the highway at certain points at a level therewith; and that the same is consistent with the public interests, — it is

Ordered, That the consent of the Board be hereby given to the construction and maintenance by the petitioner of a railroad, for private use in the transportation of freight, to be operated by steam power upon and across the highway known as Jackson street, as shown upon a plan on file in this office.

This consent is given upon the condition that a flagman shall display a flag by day and a lantern by night whenever an engine, car or train is approaching and while it is passing over said crossing, and that no engine, car or train shall cross at a greater speed than four miles an hour.

Attest: CHARLES E. MANN,
JUNE 11, 1907. [6581] Clerk.

Petition of the Fore River Shipbuilding Company for consent to the construction and maintenance of a railroad for private use in the transportation of freight across a highway in Quincy.

It appearing that the city council of Quincy has consented to the construction and maintenance of the proposed railroad across the highway; that the county commissioners of Norfolk county have adjudged that public necessity requires that the railroad cross the highway at a level therewith; and that the same is consistent with the public interests, — it is

Ordered, That the consent of the Board be hereby given to the construction and maintenance by the petitioner of a railroad, for private use in the transportation of freight, to be operated by steam power upon and across the highway known as Howard avenue, as shown upon a plan on file in this office.

This consent is given upon the condition that a flagman shall display a flag by day and a lantern by night whenever an engine, car or train is approaching and while it is passing over said crossing, and that no engine, car or train shall cross at a greater speed than four miles an hour.

The authority herein granted is subject to revocation whenever, upon further action of the Board with reference to the crossings authorized in the orders issued May 6, 1903, and July 6, 1905, it shall be determined that such grade crossings ought to be abolished.

Attest: CHARLES E. MANN,

MARCH 6, 1907. [6295]

Clerk.

Petition of the Springfield Gas Light Company for consent to construction and maintenance of a railroad for private use in the transportation of freight across highways in Springfield.

It appearing that the board of aldermen of the city of Springfield has consented to the construction and maintenance of the proposed railroad across the highways; that the county commissioners of Hampden county have adjudged that public necessity requires that the railroad cross the highways at a level therewith; and that the same is consistent with the public interests, — it is

Ordered, That the consent of the Board be hereby given to the construction and maintenance by the petitioner of a railroad, for private use in the transportation of freight, to be operated by

steam power upon and across the highways known as Howard and Bliss streets, as shown upon a plan on file in this office.

This consent is given upon the condition that a flagman shall display a flag by day and a lantern by night whenever an engine, car or train is approaching and while it is passing over said crossings, and that no engine, car or train shall cross at a greater speed than four miles an hour.

Attest: CHARLES E. MANN,
APRIL 9, 1907. [6509] Clerk.

SAFEGUARDS AT CROSSINGS.

Complaint of R. E. Belcher relative to further protection at crossing of the Boston and Albany railroad in Ashland.

After an inspection of the conditions existing at the Main street crossing of the Boston and Albany railroad in the town of Ashland, we recommend that as an additional safeguard to the travelling public the time during which this crossing shall be protected be extended to cover the entire twenty-four hours of the day.

For the Board,

CHARLES E. MANN,
NOVEMBER 30, 1907. [C1065] Clerk.

Petition of the Page-Storms Drop Forge Company for establishment of safeguard at crossing of highway and railroad at Chicopee Junction.

A private way, if largely used, may be a travelled place within the meaning of the statute which provides for the establishment of safeguards at such places.

The past and even the present use of the private way under consideration in this instance, however, does not in our opinion bring it within the statute, although there is every indication that new uses of neighboring territory will soon call for a public way across the railroad in this locality; in fact steps have already been taken by the petitioners themselves looking to the laying out of such a way.

Physical conditions will readily permit here the construction of an underpass which will prevent the peril that always attaches to a crossing at grade, however safeguarded. Under these circumstances

the Board would be unwilling, if it had the right, to encourage an increased use of this private grade crossing by protecting it with a flagman, such action tending to delay a public improvement that ought to be forwarded and not postponed.

For the Board,

JAMES F. JACKSON,

SEPTEMBER 25, 1907. [C1006]

Chairman.

Petition of citizens of Milton for flagman at the crossing of Capen street and the New York, New Haven and Hartford railroad in that town.

The physical conditions at the crossing of Capen street and the Shawmut branch of the New York, New Haven and Hartford railroad in the town of Milton are such as to partially obscure the view of approaching trains from those who are using the street.

The Board recommends therefore that electric bells be installed at this place and maintained under such a system of inspection as will keep them continuously in working order.

For the Board,

CHARLES E. MANN,

DECEMBER 14, 1907. [6795]

Clerk.

Complaint of selectmen of Needham relative to the ringing of electric bells at crossing of Oak street and the New England railroad.

About six months ago the New York, New Haven and Hartford management installed at the Oak street crossing in Needham a plant of electric bells to give warning of approaching trains for the benefit of persons using the highway. These bells, owing to the frequent passing of trains over the crossing and to the shifting of engines and cars near it, have kept up such a frequent, loud and long continued noise as to have become a nuisance to persons residing in the neighborhood.

There are places where electric bells provide a desirable method of protecting grade crossings. As a rule, however, they are not

suited to a busy crossing in a thickly settled locality. That is the trouble here.

The company contends that by shortening the electric circuit and making some changes in operating freight trains, the noise can be very materially reduced. It is probable that this can be done in the way pointed out, but the Board is of the opinion that ground of complaint would still remain and that the proper way to protect this crossing is by a flagman. Though the traffic is light, as claimed by the railroad management, the trains are many and the highway considerably used. Some safeguard is necessary and it is our judgment that, taking all the circumstances into consideration, the safeguard best adapted to the surroundings is a flagman. It is therefore so ordered.

For the Board,

JAMES F. JACKSON,

NOVEMBER 8, 1907. [6768]

Chairman.

Petition of the selectmen of Oxford for establishment of safeguard at highway and railroad crossing.

A view of the railroad premises by persons approaching them at what is known as the Chaffee crossing is partially obscured owing to buildings and to the uses that are made of adjoining lands.

The Board will ask the company to install and maintain at this place an effective system of electric bells to serve as a warning of approaching engines and trains.

For the Board,

JAMES F. JACKSON,

NOVEMBER 7, 1907. [6771]

Chairman.

Petition of the selectmen of Palmer for the establishment of safeguard at the crossing of the highway and the Central Vermont railroad in Three Rivers.

The physical conditions at the crossing of the highway and the Central Vermont railroad near the station in Three Rivers in the town of Palmer are such as to partially obscure the view of approaching trains from those who are using the highway.

After consideration, — it is

Ordered, That as a suitable safeguard for the present a modern plant of electric bells be installed at this place and be maintained in working order through the exercise of such care and inspection as will secure an effective warning upon all occasions.

Attest: CHARLES E. MANN,

SEPTEMBER 21, 1907.

[6536]

Clerk.

Petition of the selectmen of Peabody for protection at certain crossings of highways and the Boston and Maine railroad in that town.

The Board, after hearing, and a view, recommends that electric bells be installed as crossing signals in Peabody at Russell street and at Newbury street on the Lowell and Salem branch, and at Newbury street, Winona street and Lake street upon the Newburyport branch of the Boston and Maine railroad.

For the Board,

CHARLES E. MANN,

DECEMBER 2, 1907.

[6193]

Clerk.

Petition of the City of Worcester as to safeguards at railroad crossings.

An examination of the conditions that exist at the point where the private way known as Tracy court crosses the Norwich Branch of the New York, New Haven and Hartford railroad in Worcester, convinces us that this is one of those travelled places at which the company ought to maintain some form of safeguard to warn those who are using the way of approach of trains.

We recommend therefore that electric bells be installed at this place and maintained under such a system of inspection as will keep them continuously in working order.

For the Board,

JAMES F. JACKSON,

OCTOBER 10, 1907.

[6373]

Chairman.

CHANGE OF GRADE OF RAILROADS.

Petition of James R. Dunbar, Samuel L. Powers and Thomas W. Proctor, commissioners by appointment of the Superior Court to consider the abolition of certain crossings of highway and railroad in Boston, for consent to changes in the grade of the Old Colony railroad.

It appearing that certain changes in the grade of the Old Colony railroad in the city of Boston are incidental to the plan proposed by the petitioners for the abolition of certain crossings of highway and railroad in that city,

We hereby, after consideration, consent to the proposed changes in the grade of the Old Colony railroad as apparently necessary if the plan adopted by the petitioners is to be carried out; this action, however, in no wise to prejudice the right of any person to suggest different action with regard to changes in the grade of the railroad at the final hearing before this Board upon the approval of any plan for abolishing these crossings.

JAMES F. JACKSON,
GEORGE W. BISHOP,
CLINTON WHITE,

JANUARY 23, 1907. [6419]

Commissioners.

Petition of Theodore C. Hurd, George F. Swain and Fred Joy, commissioners by appointment of the Superior Court to consider the abolition of certain crossings of highway and railroad in Belmont, for consent to changes in the grades of the Fitchburg and the Boston and Maine railroads.

It appearing that certain changes in the grades of the Fitchburg railroad and of the Central Massachusetts branch of the Boston and Maine railroad in the town of Belmont are incidental to the plan proposed by the petitioners for the abolition of certain crossings of highway and railroad in that town,

We hereby, after consideration, consent to the proposed changes in the grades of the Fitchburg and Boston and Maine railroads as apparently necessary if the plan adopted by the petitioners is to be carried out; this action, however, in no wise to prejudice the right of any person to suggest different action with regard to changes in the grades of the railroads at the final hearing before

this Board upon the approval of any plan for abolishing these crossings.

JAMES F. JACKSON,
GEORGE W. BISHOP,
CLINTON WHITE,

JANUARY 25, 1907. [6458]

Commissioners.

Petition of Boyd B. Jones, Edmund K. Turner and Fred Joy, commissioners by appointment of the Superior Court to consider the abolition of certain crossings of highway and railroad in Hyde Park, for consent to changes in the grade of the New England railroad.

It appearing that certain changes in the grade of the New England railroad in the town of Hyde Park are incidental to the plan proposed by the petitioners for the abolition of certain crossings of highway and railroad in that town,

We hereby, after consideration, consent to the proposed changes in the grade of the New England railroad as apparently necessary if the plan adopted by the petitioners is to be carried out; this action, however, in no wise to prejudice the right of any person to suggest different action with regard to changes in the grade of the railroad at the final hearing before this Board upon the approval of any plan for abolishing these crossings.

JAMES F. JACKSON,
GEORGE W. BISHOP,
CLINTON WHITE,

FEBRUARY 15, 1907. [6477]

Commissioners.

ABOLITION OF GRADE CROSSINGS.

Decision of the Board sitting as a Special Commission on the abolition of the grade crossing of County Road and the Old Colony railroad in Barnstable.

COMMONWEALTH OF MASSACHUSETTS.

BARNSTABLE SS.

SUPERIOR COURT IN EQUITY.

SELECTMEN OF BARNSTABLE PETITIONERS FOR ALTERATION OF POND
VILLAGE ROAD GRADE CROSSING IN BARNSTABLE.

Finding of Commission.

In the above entitled matter at a superior court holden on the 21st day of February, 1907, we, James F. Jackson, George W.

Bishop, and Clinton White, being the members of the Board of Railroad Commissioners, were in accordance with a written agreement of the parties hereto, appointed a commission under the provisions of the Acts of 1906, chapter 463, part 1, section 29, to act upon the petition filed in this cause. Due notice of a hearing was given, and hearings have been held at the office of the Board, 20 Beacon street, Boston. At such hearings the parties were represented as follows: for the commonwealth Assistant Attorney General W. P. Hall, for the railroad companies F. A. Farnham, the selectmen of Barnstable being represented by members of their own body.

We heard and considered all the evidence and arguments which the parties desired to present. The parties agreed that the security and convenience of the public required an alteration by which the grade crossing of the County road, otherwise known as Pond Village road, and the railroad, should be abolished.

Now, after due consideration we decide that the security and convenience of the public require an alteration including the discontinuance of the public way and building a new way in substitution therefor, so as to avoid crossing at grade, and we prescribe the manner and limits within which such alteration and substitution shall be made, as follows, viz.:

Changes in Way.

That portion of the way known as County road, within the limits of the railroad location and crossing the railroad at grade, is hereby discontinued at grade, and a new way is hereby laid out in substitution therefor bounded and described as follows: viz.:

The easterly line of said new way begins at a point in the easterly line of County road, so called, at the intersection of line of land of Edward Harding and C. D. Walker; thence north $57^{\circ} 02' 15''$ east about two hundred twenty (220) feet; thence by a curve to the left, having a radius of one hundred sixty-five (165) feet, one hundred thirteen and thirty-two one-hundredths (113.32) feet; thence north $17^{\circ} 41' 15''$ east, crossing the location of the Old Colony railroad, about one hundred fifty (150) feet; thence by a curve to the right having a radius of one hundred eighty-five (185) feet, about one hundred nine (109) feet to the southerly line of said County road.

The westerly line of said new way is parallel with and thirty (30) feet distant westerly at a right angle from said above described easterly line.

The grade of said new way is hereby established so that the way may be carried under the railroad as follows: viz.:

Beginning at station 4 + 40 south, on the profile, in the center of the travelled way of said County road, at the elevation of forty-six and twenty-six one-hundredths (46.26) feet; thence descending at the rate of six-tenths (0.6) of a foot per one hundred feet to station 0 + 30 south, at the elevation of forty-three and eight-tenths (43.8) feet; thence level to station 0 + 15 north; thence ascending at the rate of one (1) foot per one hundred feet to station 2 north, at the elevation of forty-five and sixty-five one-hundredths (45.65) feet; thence descending by a vertical curve to station 3 north, at the elevation of forty-three and nine-tenths (43.9) feet.

The profile and description of the grades of the way, together with the elevations, are made upon the center line of the way, and are from the City of Boston base, being the level of mean low water at Charlestown Navy Yard.

Said new way hereby laid out and established shall be constructed with sand, gravel or other suitable material according to the standards of the Massachusetts State Highway Commission, having a finished surface of twenty-one (21) feet in width.

The surface of said new way at the finished grade shall be of gravel, and the railroad shall be carried over it by a substantial single track steel bridge supported on masonry abutments, as shown, having a clear opening of thirty (30) feet at right angles and a clearance of thirteen (13) feet from the crown of the street to the under side of the bridge, as shown on plan hereby filed as a part of this report.

Land Taken for Highway Purposes.

To make the alterations hereby prescribed, it is necessary to take certain parcels of land for highway purposes, which parcels of land are hereby taken for such purposes, and are bounded and described as follows: viz.:

Parcel No. 1.—A certain parcel of land supposed to belong to C. D. Walker, and bounded and described as follows:

Beginning at the intersection of line of land of Edward Harding and C. D. Walker with the easterly line of County road, so called; thence north $57^{\circ} 02' 15''$ east about two hundred twenty (220) feet; thence by a curve to the left, having a radius of one hundred sixty-five (165) feet, one hundred thirteen and thirty-two one-hundredths (113.32) feet; thence north $17^{\circ} 41' 15''$ east about eight (8) feet to the southerly side line of location of the Old Col-

ony railroad; thence by said southerly side line of location south $84^{\circ} 4' 15''$ west thirty-two and seventy-four one-hundredths (32.74) feet; thence by a curve to the right, having a radius of one hundred thirty-five (135) feet, eighty-seven and fifty-two one-hundredths (87.52) feet; thence south $57^{\circ} 02' 15''$ west about one hundred fifty-seven (157) feet to said easterly line of County road; thence southerly by said easterly line about seventy (70) feet to the point of beginning, being all the land lying southerly of the location of the Old Colony railroad within the limits of the new way hereby laid out and established, containing about eight thousand seven hundred (8,700) square feet.

Parcel No. 2. — A certain parcel of land supposed to belong to E. R. Hinckley and bounded and described as follows:

Beginning at the intersection of the northerly side line of location of the Old Colony railroad with the westerly line of the new way hereby laid out; thence north $17^{\circ} 41' 15''$ east, about twenty-one (21) feet, to line of land of J. A. Hinckley; thence southeasterly by said line of land, about twenty-one (21) feet, to said northerly side line of location; thence south $84^{\circ} 4' 15''$ west by said northerly side line of location, about nineteen (19) feet, to the point of beginning, containing about one hundred and ninety (190) square feet.

Parcel No. 3. — A certain parcel of land supposed to belong to J. A. Hinckley, and bounded and described as follows:

Beginning at the intersection of the northerly side line of location of the Old Colony railroad with the easterly line of the new way hereby laid out; thence north $17^{\circ} 41' 15''$ east about fifty-two (52) feet; thence by a curve to the right having a radius of one hundred eighty-five (185) feet about one hundred nine (109) feet to the southerly line of County road, so called; thence westerly by said southerly line about thirty-one (31) feet; thence southwesterly by said southerly line about twenty-six (26) feet; thence by a curve to the left having a radius of two hundred and fifteen (215) feet, about seventy-six (76) feet; thence south $17^{\circ} 41' 15''$ west about forty-four (44) feet to line of land of E. R. Hinckley, thence southeasterly by said line of land about twenty-one (21) feet to said northerly side line of location; thence north $84^{\circ} 4' 15''$ east by said northerly side line of location about thirteen and seventy-four one-hundredths (13.74) feet to the point of beginning, containing about four thousand six hundred fifteen (4,615) square feet.

Taking for Slopes.

Wherever in the execution of the work hereby prescribed it is necessary to make slopes, either in excavation or embankment on abutting land, an easement in the land to be covered by such slopes is hereby taken, consisting of the right to have the land of the location of the highway protected by having the surface of such adjoining land sloped from the boundary of the location.

Plan.

We file herewith as a part of our report and decision, plan marked, — “Plan for Abolition of Grade Crossing, County Road, Old Colony Railroad, Barnstable, Mass.,” verified by the signatures of the Commissioners.

Said plan, together with all lines, letters, figures, and directions thereon, is to be taken together with our report and decision as a part thereof.

The Work.

The New York, New Haven and Hartford Railroad Company, lessee of the Old Colony railroad, shall do all the work herein prescribed to be done in accordance with this report and decision.

Apportionment of Cost.

We apportion the thirty-five per centum (35 %) of the total actual cost of the alteration, including in such cost the cost of the hearings and the compensation of the auditor for his services, and all damages including those mentioned in section 37 of part I of Chapter 463 of the acts of 1906 and acts in addition thereto and in amendment thereof, which are to be paid by the Commonwealth of Massachusetts and the Town of Barnstable, as follows, viz.:

The Town of Barnstable shall pay ten per centum (10 %) of such total actual cost, and the Commonwealth shall pay twenty-five per centum (25 %) thereof; and the other sixty-five per centum (65 %) being paid by the railroad company, as required by law.

JAMES F. JACKSON,
GEORGE W. BISHOP,
CLINTON WHITE,

NOVEMBER 18, 1907. [6560]

Commissioners.

Decision of the Board sitting as a Grade Crossing Commission on the abolition of the crossing of Mendon street and the New England railroad in Blackstone.

COMMONWEALTH OF MASSACHUSETTS.

WORCESTER SS.

SUPERIOR COURT IN EQUITY.

THE NEW ENGLAND RAILROAD COMPANY PETITIONER FOR ALTERATION
OF MENDON STREET GRADE CROSSING IN BLACKSTONE.

Finding of the Commission.

In the above entitled matter at a superior court holden on the 8th day of December, 1906, we, James F. Jackson, George W. Bishop, and Clinton White, being the members of the board of railroad commissioners, were in accordance with a written agreement of the parties hereto, appointed a commission under the provisions of the acts of 1906, chapter 463, part 1, section 29, to act upon the petition filed in this cause. Due notice of hearing was given and a hearing was held at the office of the board at 20 Beacon street, Boston, on the fifth day of February, and by adjournment on the twenty-first day of March, 1907. The parties were represented as follows: for the commonwealth, Assistant Attorney-General W. P. Hall; for the selectmen of Blackstone, John F. Meaney; and for the railroad companies F. A. Farnham. We heard and considered all the evidence and arguments which the parties desired to present. The parties agreed that the security and convenience of the public required an alteration by which the grade crossing of Mendon street should be abolished and the parties also agreed as to the manner and limits in which the work should be carried out.

Now after due consideration we decide that the security and convenience of the public require the discontinuance of a public way known as Mendon street, crossing the railroad at grade, and the building of a new way in substitution therefor, so as to avoid crossing at grade.

Manner and Limits of Alterations.

We prescribe the manner and limits within which such alteration and substitution shall be made as follows, viz.:

That portion of Mendon street, so-called, within the limits of the southerly side line of the railroad location and a line drawn parallel with and fifty-nine (59) feet northerly at a right angle from the base line of said location, and crossing the railroad at

grade, is hereby discontinued, and a new way is hereby laid out in substitution therefor and bounded and described as follows, viz.:

The southerly line of said new way begins at a point in the northerly line of Main street, so-called, distant thirty-three and five-tenths (33.5) feet northeasterly at a right angle from the base line of location of the New England railroad; thence by a curve to the left having a radius of twenty-five and five-tenths (25.5) feet thirty-five and three-tenths (35.3) feet, to a point distant fifty-nine (59) feet northeasterly at a right angle from said base line of location; thence north $64^{\circ}-41'-55''$ west, parallel with and fifty-nine (59) feet distant at a right angle from said base line of location, two hundred sixty and eight-tenths (260.8) feet to the easterly line of Mendon street, so-called.

The northerly line of said new way is parallel with and fifty (50) feet northeasterly at a right angle from the main portion of the above described southerly line, and of said line produced.

The grade of the new way is hereby established as follows, viz.: Beginning at station 0 of the center line of said new way at its intersection with the easterly line of said Mendon street, at the elevation of one hundred five and twenty-nine one-hundredths (105.29) feet; thence easterly on said center line by a descending grade at the rate of seven and one-tenth (7.1) feet per one hundred feet to station 3 + 67 in the northerly line of said Main street, at the elevation of seventy-nine and twenty-four one-hundredths (79.24) feet.

The new way shall be graded fifty (50) feet wide as shown on plan at the grade hereby established, and constructed with sidewalks and paved gutters upon either side thereof, the surface of the sidewalks shall be of gravel and the roadway shall have a gravel surface. The sidewalk grades are to conform as nearly as possible to the grades hereby established, and are to be so altered as to connect with the existing sidewalk grades of said Main street and Mendon street. The elevations given are from the City of Boston base.

Land taken for Highway Purposes.

To make alterations hereby prescribed, it is necessary to take a parcel of land for highway purposes, which parcel of land is hereby taken for such purposes and is bounded and described as follows, viz.:

A certain parcel of land supposed to belong to Blackstone Manufacturing Company;

Beginning at a point in the northerly line of Main street, so-called, distant thirty-three and five-tenths (33.5) feet northeasterly at a right angle from the base line of location of the New England railroad; thence by a curve to the left having a radius of twenty-five and five-tenths (25.5) feet, thirty-five and three-tenths (35.3) feet to a point distant fifty-nine (59) feet northeasterly at a right angle from said base line of location; thence north $64^{\circ}-41'-55''$ west, parallel with and fifty-nine (59) feet distant at a right angle from said base line of location, two hundred sixty and eight-tenths (260.8) feet to the easterly line of Mendon street, so-called; thence north $14^{\circ}-27'$ west, sixty-five (65) feet, to an angle; thence south $64^{\circ}-41'-55''$ east, four hundred seventeen and four-tenths (417.4) feet, to the northwesterly line of Main street, so-called; thence south $75^{\circ}-13'$ west by said northwesterly line, one hundred seventeen and two-tenths (117.2) feet to the point of beginning, containing about eighteen thousand eight hundred and seventy-five (18875) square feet.

Plans.

We file herewith as a part of our report and decision a plan entitled "Plan for Abolition of Grade Crossing, Mendon Street, New England Railroad, Blackstone, Mass.," dated April 18, 1907, verified by the signatures of the Commissioners, and said plan, together with all lines, letters, figures and directions thereon, is to be taken together with our report and decision as a part thereof.

The Work.

The New York, New Haven and Hartford Railroad Company, lessee of The New England Railroad Company, shall do all the work herein prescribed to be done, in accordance with the provisions of this report and decision.

Apportionment of Cost.

We apportion the thirty-five per centum (35%) of the total actual cost of the alterations, including in such cost the cost of the hearings and the compensation of the auditor for his services and all damages including those mentioned in chapter 463 of the acts of 1906, and acts in addition thereto and in amendment thereof, which are to be paid by the Commonwealth of Massachusetts and the Town of Blackstone, as follows, viz.: The Town of Blackstone shall pay ten per centum (10%) of such total actual cost and the Commonwealth shall pay twenty-five per centum

(25%) thereof, the other sixty-five per centum (65%) being paid by the railroad companies, as required by law.

JAMES F. JACKSON,
GEORGE W. BISHOP,
CLINTON WHITE,

APRIL 29, 1907. [6392]

Commissioners.

REPORT AS TO ABOLITION OF GRADE CROSSINGS.

Petition of the Boston and Maine Railroad for certificate approving plan for abolishing grade crossings in Lynn.

H. F. HURLBURT for Boston and Maine railroad.

J. L. BATES
STARR PARSONS } for city of Lynn.

E. W. BURDETTE for Boston and Northern street railway.

Prior to 1902 the only duties which this Board had to perform in connection with the abolition of grade crossings were in passing upon changes in the grade of railroads and in determining whether there was sufficient money in the state fund to pay the contribution of the Commonwealth. In that year the law was changed so that now the Board is required to certify "that in their opinion the adoption of the plan" proposed by the special commissioners appointed by the Superior Court "and the expenditure to be incurred thereunder" are consistent with the public interests.

Perhaps no grade crossings in the commonwealth have attracted more attention than those in Lynn. Every consideration of public convenience and of true economy demanded their abolition years ago, when, after the great fire, the cost of such change would have been far less than it must be now, a fact to which attention was seasonably called by the Board.

The report of the special commissioners which is now presented for approval clearly shows that the action taken upon several important matters was largely due to an understanding that such action was agreeable to all the interested parties.

At the hearings it was apparent that whatever agreement may have once existed there is now a widespread dissatisfaction with this plan.

The abolition of the crossings upon the Saugus branch at the same time with those upon the main line would be unwise; first because conditions on that branch are not upon a sufficiently permanent footing, and again because such radical changes upon both

lines of railroad at one time might work disastrous results in the interruption of passenger and freight traffic. The abolition of the Chatham street crossing, too, can well stand upon an independent footing and be treated at a later day.

But in our opinion the plan for abolishing the other crossings upon the main line should include those at Commercial street and Shepard street, and not leave them, as they are now left, to be considered in a future proceeding.

There is evident reason for further consideration of the method of dealing with Silsbee street in the light of suggestions not presented to the special commissioners, especially the suggestion that in view of certain advantages to be realized in carrying this highway under the railroad those interested in securing these advantages might be willing to contribute to the cost.

While it seems clearly impracticable to provide a bridge with stone arches at Central square there would appear to be no reason why the street at this point should not be lowered to give a clearance of fifteen feet.

The remaining objections to the plan of the special commissioners relate to features of the work with respect to which the Board believes the judgment of the special commissioners should be conclusive, whatever their decision may finally be.

Without formally disapproving the plan before it, the Board suggests that the hearings by the special commissioners be reopened for the purpose of including in this proceeding the abolition of the crossings at Commercial and Shepard streets and of giving further consideration to the treatment of the crossings at Silsbee street and at Central square.

By the Board,

JAMES F. JACKSON,
Chairman.

JANUARY 19, 1907. [6246]

CERTIFICATES RELATIVE TO ABOLITION OF GRADE CROSSINGS.

Petition of the New York, New Haven and Hartford Railroad Company for certificate relative to abolition of grade crossing in Barnstable.

After hearing and such further inquiry as was deemed necessary, — it is

Ordered, That the Board hereby certify that in its opinion the

adoption of the plan for abolishing the grade crossing of Pond Village road and the Old Colony railroad in Barnstable, set forth in the report of the members of this Board sitting as a special commission under appointment of the Superior Court, and the expenditure incurred thereunder are consistent with the public interests and are reasonably required to secure a fair distribution between the different cities, towns and railroads of the commonwealth of the public money appropriated for the abolition of grade crossings, and that such expenditure will not in its judgment exceed the amount to be paid by the Commonwealth under the provisions of law relating thereto.

Attest: CHARLES E. MANN,

DECEMBER 3, 1907. [6817]

Clerk.

Petition of the selectmen of Belmont for certificate relative to abolition of grade crossing in that town.

After notice and hearing and an examination of the proposed plan for abolishing the grade crossing of highway and the Fitchburg railroad and the Boston and Maine railroad at the junction of Concord avenue, Common and Leonard streets in Belmont, as set forth in the report of the special commission appointed by the Superior Court to consider the matter, and after consideration of the expenditure therein authorized, — it is

Ordered, That the Board hereby certify that in its opinion the adoption of said plan and the incurring of such expenditure are consistent with the public interests and are reasonably required to secure a fair distribution between the different cities, towns and railroads of the commonwealth of the public money appropriated for the abolition of grade crossings, and that such expenditure will not in its judgment exceed the amount to be paid by the Commonwealth under the provisions of law relating thereto.

Attest: CHARLES E. MANN,

MARCH 4, 1907. [6463]

Clerk.

Petition of the New York, New Haven and Hartford Railroad Company for certificate relative to abolition of grade crossing in Blackstone.

After hearing and such further inquiry as was deemed necessary, — it is

Ordered, That the Board hereby certify that in its opinion the

adoption of the plan for abolishing the grade crossing of Mendon street and the New England railroad in Blackstone, set forth in the report of the members of this Board sitting as a special commission under appointment of the Superior Court, and the expenditure incurred thereunder are consistent with the public interests and are reasonably required to secure a fair distribution between the different cities, towns and railroads of the commonwealth of the public money appropriated for the abolition of grade crossings, and that such expenditure will not in its judgment exceed the amount to be paid by the Commonwealth under the provisions of law relating thereto.

Attest: CHARLES E. MANN,

MAY 17, 1907.

[6558]

Clerk.

Petition of the New York, New Haven and Hartford and the Old Colony railroad companies for a certificate approving the plan of the special commission appointed by the Court for abolishing crossings of highway and railroad at grade in Dorchester.

The physical conditions in the neighborhood of the crossings which it is proposed to abolish make any plan for their elimination by depressing the railroad objectionable. Experience proves that while a railroad can be maintained at this low level with reference to tide water it involves the possible serious interference at times with traffic, and this fact is a sufficient reason why the decision of the special commission to raise rather than lower the railroad is a wise conclusion.

Obviously no plan ought to be adopted in dealing with these crossings that is not consistent with the best way of dealing with other crossings to be abolished in the future. Examined from that standpoint the plan submitted fully stands the test and is clearly consistent with the public interests.

To the suggestion that the railroad be raised to a greater height at Neponset and this higher grade carried to the station at Atlantic the reply is that this higher elevation would interfere with the advantageous development of important tracts of land that will call for the construction of side tracks to meet commercial uses for which these premises are peculiarly adapted.

Walnut street is a long established thoroughfare, and to disturb it will seriously annoy the occupants of adjoining estates, but the plan of the commission provides an adequate substitute for this highway as far as the general public is concerned, and it would

be little less than folly to leave that crossing at grade when the others are being removed under the established policy of the state in protection of human life.

No plan for abolishing grade crossings can be devised that will not arouse opposition from private interests that are necessarily invaded. The plan which is presented in this instance is one which upon the whole accomplishes the largest possible benefit with the least interference with private property, and is therefore approved.

For the Board,

JAMES F. JACKSON,

AUGUST 12, 1907. [6505]

Chairman.

Certificate.

After notice and hearing and an examination of the proposed plan for abolishing the grade crossings of railroads and highways known as Freeman, Park, Mill, Elm, Clayton, Freeport and Adams streets, and Dorchester avenue and Walnut street in the city of Boston, as set forth in the report of the special commission appointed by the Superior Court to consider the matter, and after consideration of the expenditure therein authorized,—it is

Ordered, That the Board hereby certify that in its opinion the adoption of said plan and the incurring of such expenditure are consistent with the public interests and are reasonably required to secure a fair distribution between the different cities, towns and railroads of the commonwealth of the public money appropriated for the abolition of grade crossings, and that such expenditure will not in its judgment exceed the amount to be paid by the Commonwealth under the provisions of law relating thereto.

Attest:

ALLAN BROOKS,

AUGUST 12, 1907. [6505]

Assistant Clerk.

Petition of the board of aldermen of the city of Fitchburg for certificate relative to abolition of grade crossing.

After notice and hearing and an examination of the proposed plan for abolishing the grade crossing of Rollstone street and the tracks of the Vermont and Massachusetts railroad in the city of Fitchburg, as set forth in the report of the special commission

appointed by the Superior Court to consider the matter, and after consideration of the expenditure therein authorized, — it is

Ordered, That the Board hereby certify that in its opinion the adoption of said plan and the incurring of such expenditure are consistent with the public interests and are reasonably required to secure a fair distribution between the different cities, towns and railroads of the commonwealth of the public money appropriated for the abolition of grade crossings, and that such expenditure will not in its judgment exceed the amount to be paid by the Commonwealth under the provisions of law relating thereto.

Attest: CHARLES E. MANN,
SEPTEMBER 10, 1907. [6704] *Clerk.*

Petition of the selectmen of Greenfield for certificate relative to abolition of grade crossing in that town.

After notice and hearing and examination of the proposed plan for abolishing the grade crossing of Allen street and the Connecticut River railroad in the town of Greenfield, as set forth in the report of the special commission appointed by the Superior Court to consider the matter, and after full consideration of the expenditure therein authorized, — it is

Ordered, That the Board hereby certify that in its opinion the adoption of said plan and the incurring of such expenditure are consistent with the public interests and are reasonably required to secure a fair distribution between the different cities, towns and railroads of the commonwealth of the public money appropriated for the abolition of grade crossings, and that such expenditure will not in its judgment exceed the amount to be paid by the Commonwealth under the provisions of law relating thereto.

Attest: CHARLES E. MANN,
FEBRUARY 8, 1907. [5489] *Clerk.*

Petition of the selectmen of Hyde Park for certificate relative to abolition of grade crossings in that town.

After notice and hearing and an examination of the proposed plan for abolishing the grade crossings of the New England railroad and highways known as Fairmount avenue and Bridge street in Hyde Park, as set forth in the report of the special commission

appointed by the Superior Court to consider the matter, and after consideration of the expenditure therein authorized, — it is

Ordered, That the Board hereby certify that in its opinion the adoption of said plan and the incurring of such expenditure are consistent with the public interests and are reasonably required to secure a fair distribution between the different cities, towns and railroads of the commonwealth of the public money appropriated for the abolition of grade crossings, and that such expenditure will not in its judgment exceed the amount to be paid by the Commonwealth under the provisions of law relating thereto.

Attest: CHARLES E. MANN,

MARCH 15, 1907. [6484]

Clerk.

Petition of the Boston and Maine Railroad for certificate relative to abolition of grade crossing in Rowley.

After notice and hearing and an examination of the proposed plan for abolishing the grade crossing of railroad and the highway known as Main street in the town of Rowley, as set forth in the report of the special commission appointed by the Superior Court to consider the matter, and after consideration of the expenditure therein authorized, — it is

Ordered, That the Board hereby certify that in its opinion the adoption of said plan and the incurring of such expenditure are consistent with the public interests and are reasonably required to secure a fair distribution between the different cities, towns and railroads of the commonwealth of the public money appropriated for the abolition of grade crossings, and that such expenditure will not in its judgment exceed the amount to be paid by the Commonwealth under the provisions of law relating thereto.

Attest: CHARLES E. MANN,

JULY 17, 1907. [6634]

Clerk.

Petition of the mayor and aldermen of Worcester for certificate relative to abolition of grade crossings.

After notice and hearing and an examination of the proposed plan for abolishing the grade crossings of highways and the Boston and Albany railroad, the Norwich and Worcester railroad and the Providence and Worcester railroad in the city of Worcester, as set

forth in the report of the special commission appointed by the Superior Court to consider the matter, and after consideration of the expenditure therein authorized, — it is

Ordered, That the Board hereby certify that in its opinion the adoption of said plan and the incurring of such expenditure are consistent with the public interests and are reasonably required to secure a fair distribution between the different cities, towns and railroads of the commonwealth of the public money appropriated for the abolition of grade crossings, and that such expenditure will not in its judgment exceed the amount to be paid by the Commonwealth under the provisions of law relating thereto.

Attest: CHARLES E. MANN,
JULY 22, 1907. [6616] _____ Clerk.

Notices of Petitions.

During the year the Board has been served with notices of the following petitions as to grade crossings or for the appointment of special commissions to consider the abolition or alteration of crossings: —

Boston, May 20, 1907 — Petition of the mayor and aldermen of Boston for abolition of grade crossings of Neponset and Granite avenues and the Old Colony railroad in the Dorchester district of Boston. [6449]

Fitchburg, January 19, 1907 — Petition of board of aldermen of Fitchburg for abolition of grade crossing of Rollstone street and the Vermont and Massachusetts railroad. [6449]

Lowell, April 11, 1907 — Petition of the mayor and aldermen of Lowell for abolition of grade crossings of Plain street and Boston road and the Old Colony railroad and the Lowell and Andover railroad (leased to and operated by the Boston and Maine Railroad). [6449]

Lowell, April 11, 1907 — Petition of the mayor and aldermen of Lowell for abolition of grade crossing of Lincoln street and the Old Colony railroad. [6449]

Lowell, April 11, 1907 — Petition of the mayor and aldermen of Lowell for abolition of grade crossing of School and Walker streets and the Nashua and Lowell railroad (leased to and operated by the Boston and Maine Railroad). [6449]

North Adams, July 27, 1907 — Petition of the mayor and city council of North Adams for abolition of grade crossing of State street and the Boston and Maine railroad. [6449]

Rowley, May 28, 1907 — Petition of the directors of the Boston and Maine Railroad for abolition of grade crossing of the railroad of said company and Main street in Rowley. [6449]

ALTERATION OF CROSSINGS.

Petition of the New York, New Haven and Hartford Railroad Company for approval of alteration in crossings of highway and railroad in Attleborough.

It appearing, after notice and hearing, that the selectmen of the town of Attleborough and the directors of the New York, New Haven and Hartford Railroad Company and of the Boston and Providence Railroad Corporation are of opinion that it is necessary for the security and convenience of the public that an alteration be made in the crossings of Dodgeville road, Pond street, County street and Newport road and the Boston and Providence railroad, leased to and operated by the New York, New Haven and Hartford Railroad Company, by which the bridges carrying said highways are to be raised above their present height; that they are agreed upon the character of the alteration to be made; and that an instrument in writing specifying the manner and limits within which said alteration shall be made, the party by whom the work shall be done, the general method of construction and the apportionment of cost, has been duly executed by the chairman of the selectmen of Attleborough and by the presidents of the railroad corporations, a copy of which agreement is as follows:

AGREEMENT FOR ALTERATION OF CERTAIN CROSSINGS OF HIGHWAY AND RAILROAD IN THE TOWN OF ATTLEBOROUGH.

Whereas there are certain crossings in the town of Attleborough known respectively as Dodgeville road, Pond street, County street, and Newport road by which said streets are carried over the railroad of the Boston and Providence Railroad Corporation, leased to and operated by The New York, New Haven and Hartford Railroad Company; and the directors of said railroad companies and the selectmen of said town are of the opinion that it is necessary for the security and convenience of the public that alterations be made in each of said crossings by which the respective bridges shall be raised in height over said railroad; and have agreed as to the alterations which shall be made.

Now therefore in pursuance of the provisions of the acts of 1906, chapter 463, part 1, section 41, this instrument in writing is made and signed in behalf of said town by the chairman of the selectmen, duly authorized by the selectmen, and in behalf of said directors by the

presidents of the respective companies, thereunto duly authorized by the directors, specifying the manner and limits within which the alterations shall be made, and by which party the work shall be done, and the general method of construction, and how the cost shall be borne.

Dodgeville Road.

At Dodgeville road bridge No. 36 the bridge shall be raised so that the surface of the roadway will be 3 inches higher than it now is. The north approach to the bridge shall be raised 3 inches with good top dressing gravel with a width of 30 feet at the bridge and with a width of 39 feet at a point 50 feet from the bridge, and thence northerly continuing with said last named width said gravel filling shall extend to a point 225 feet distant from the bridge and at such point be graded off with proper surface so as to meet the surface of the highway as it now is. The north end of the wing wall of the present bridge abutment is to be extended about 15 feet northerly with proper thickness and with its height to fit the new highway surface as above described.

The south approach to the bridge shall be graded out with good top dressing gravel, with a width of 36 feet to a point 150 feet distant southerly from the bridge, there to unite with the present surface of the highway in a workmanlike manner, with a depth of filling in this limit generally 3 inches and sufficient additional depth up to 6 inches to 8 inches thick to raise the low place 40 feet south of the bridge in a suitable manner. Sufficient filling shall also be made to grade up the approach to the adjoining private way leading toward the northwest.

Pond Street.

At Pond street bridge No. 40 the bridge shall be raised so that the surface of the roadway will be 1 foot higher than it now is. The east approach to the bridge shall be raised with satisfactory earth filling for the full width between the fence railings with a grade generally parallel with the present surface of the street, properly crowned, with depth of filling to average 15 inches thick in the center and 6 inches on the sides at the railings so made that the rate of grade shall not be steeper than it now is. Such filling shall extend to a point 350 feet distant from the bridge and there unite with the present surface of the highway in a workmanlike manner.

The west approach to the bridge shall be raised with earth filling 28 feet wide and 1 foot thick at the bridge and at a point 25 feet from the bridge 18 inches thick in the center and 6 inches thick at the sides and thence westerly with a true slope so as to unite with the present surface of the highway at a point 80 feet from the bridge.

The surface of the highway for the length of 150 feet next westerly shall be crowned and neatly surfaced with top dressing gravel to average 6 inches thick with a width of 20 feet.

The stone walls on the east approach shall be topped out as required equivalent in work to 100 feet long, $1\frac{1}{2}$ feet wide and 1 foot high, also on the east abutment the south wing wall shall be extended 14 feet longer; also the steps of both the north and south wings of both east and west abutments shall be raised 1 foot higher. On the sides of the west approach the bank walls shall be built up 1 foot higher for the length required.

County Street.

At County street bridge No. 43 the bridge shall be raised so that the surface of the roadway will be 1 foot higher than it now is. The east approach to the bridge shall be raised with satisfactory earth filling for the full width between the fence railings with a grade generally parallel with the present surface of the street, properly crowned with depth of filling to average about 15 inches thick in the center and 6 inches on the sides at the railings so made that the rate of grade shall not be steeper than it now is. Such filling shall extend easterly to a point 350 feet distant from the bridge and then unite with the present surface of the highway in a workmanlike manner.

To retain above named filling the south end of the wing wall of the easterly bridge abutment shall be properly extended and the sloping steps of said wing wall shall be repaired and also such part of the fence railings as may be necessary on both east and west approaches shall be reset.

The west approach shall be raised with such earth filling as required with widths and thickness as above mentioned for the east approach so that the rate of grade shall not be steeper than it now is, and shall extend to a distance of 400 feet westerly from the bridge and then unite with the present surface of the highway in a workmanlike manner.

Newport Road.

At Newport road bridge No. 44 the bridge shall be raised so that the surface of the roadway will be 1 foot higher than it now is.

The west approach to the bridge shall be raised with suitable earth filling for the full width between fence railings with a depth of 18 inches in the center and 12 inches at the sides properly crowned and surfaced extending to a point 400 feet west of the bridge and there graded down and united with the present surface of the highway in a workmanlike manner.

The east approach to the bridge shall be raised with suitable earth filling for the full width between fence railings with a depth of 18 inches in the center and 12 inches at the sides, properly crowned and surfaced, extending to a point 425 feet east of the bridge and there graded down and united with the present surface of the highway in a workmanlike manner.

At places on the side slopes of the embankments of the several highways, viz.: On the side slopes of the east approach at Pond street bridge No. 40, On the side slopes of both east and west approach at County street bridge No. 43, On the side slopes of both east and west approach at Newport road bridge No. 44, additional earth filling shall be made as it may prove to be necessary to support properly the surface filling to be made for raising the approaches.

The quality of earth used for filling shall be suitable and the top wearing surfaces of all parts of highway (both roadway and sidewalks) shall be made with a suitable quality of top dressing or binding gravel of sufficient thickness properly graded, crowned and surfaced, and finished suitably for the passage over them of teams with heavy loads.

Performance of the Work.

The New York, New Haven and Hartford Railroad Company shall furnish all the material and do all the work necessary to accomplish the above described alterations.

Apportionment of Expense.

The total cost of the alterations as aforesaid, including the cost of any necessary hearings, the expenses of the board of railroad commissioners and its necessary agents, and all damages, shall be paid by the New York, New Haven and Hartford Railroad Company.

Maintenance.

The obligation of maintaining and keeping in repair the bridges and the approaches thereto covered by this agreement shall hereafter rest upon the Boston and Providence Railroad Corporation and its lessee The New York, New Haven and Hartford Railroad Company.

Signed in behalf of the selectmen of Attleborough by the chairman thereunto duly authorized, and in behalf of the boards of directors of the railroad companies by the respective presidents of the railroad companies thereunto duly authorized.

SELECTMEN OF ATTLEBOROUGH,

By M. G. ASHLEY,

Chairman.

BOSTON AND PROVIDENCE RAILROAD CORPORATION,

By PHILIP DEXTER,

President.

THE NEW YORK, NEW HAVEN AND HARTFORD RAILROAD COMPANY,

By C. S. MELLEN,

President.

It is *Ordered*, That the approval of the Board be hereby given to the agreement and to the alteration therein set forth as necessary for the convenience and security of the public.

Attest: CHARLES E. MANN,
MARCH 16, 1907. [6493] Clerk.

Petition of the New York, New Haven and Hartford Railroad Company for approval of alteration in crossing of highway and railroad in Foxborough.

It appearing, after notice and hearing, that the selectmen of the town of Foxborough and the directors of the New York, New Haven and Hartford Railroad Company and of the Boston and Providence Railroad Corporation are of opinion that it is necessary for the security and convenience of the public that an alteration be made in the crossing of East street and the Boston and Providence railroad, leased to and operated by the New York, New Haven and Hartford Railroad Company, by which the bridge carrying said highway is to be raised above its present height; that they are agreed upon the character of the alteration to be made; and that an instrument in writing specifying the manner and limits within which said alteration shall be made, the party by whom the work shall be done, the general method of construction and the apportionment of cost, has been duly executed by the chairman of the selectmen of Foxborough and by the presidents of the railroad corporations, a copy of which agreement is as follows:

AGREEMENT FOR ALTERATION OF THE CROSSING OF EAST STREET AND
RAILROAD IN THE TOWN OF FOXBOROUGH.

Whereas there is a certain crossing in the town of Foxborough known as East street by which said street is carried over the railroad of the Boston and Providence Railroad Corporation, leased to and operated by the New York, New Haven and Hartford Railroad Company, and the directors of said railroad companies and the selectmen of said town are of the opinion that it is necessary for the security and convenience of the public that an alteration be made in said crossing by which the bridge shall be raised in height over said railroad, and have agreed as to the alterations which shall be made:

Now therefore in pursuance of the provisions of the acts of 1906, chapter 463, part 1, section 41, this instrument in writing is made and signed in behalf of said town by the chairman of the selectmen,

thereunto duly authorized by the selectmen, and in behalf of said directors by the presidents of the respective companies, thereunto duly authorized by the directors, specifying the manner and limits within which the alterations shall be made, and by whom the work shall be done, and the general method of construction, and how the cost shall be borne.

Alteration in Bridge and Approaches.

The bridge shall be raised so that the surface of the roadway will be 8 inches higher than it now is. The west approach to the bridge shall be raised 8 inches with good top dressing gravel for its full width at the bridge and thence westerly with a width of filling of about 30 feet to a point about 60 feet from the bridge where the new filling shall be graded off properly to meet the surface of the highway as it now is. The east approach to the bridge shall also be raised 8 inches with good top dressing gravel for its full width at the bridge and thence easterly the new filling shall extend for a distance of 45 feet more or less where it joins East street, at which limit it shall be graded off properly to meet the surface of the highways as they now are so as to make a proper roadway surface at its junction with East street at the turns in the roadway both toward the north and south.

Plan.

The alterations hereinbefore described are shown upon a plan herewith entitled "N. Y. N. H. & H. R. R. Providence Div. Location at Bridge No. 27, Boston. Feb. 4th, 1907."

Performance of the Work.

The New York, New Haven and Hartford Railroad Company shall furnish all the material and do all the work necessary to accomplish the above described alteration.

Apportionment of Expense.

The total cost of the alteration as aforesaid, including the cost of any necessary hearings, the expenses of the board of railroad commissioners and its necessary agents, and all damage, shall be paid by The New York, New Haven and Hartford Railroad Company.

Maintenance.

The obligation of maintaining and keeping in repair the bridge including the abutments and the approaches thereto, within the limits covered by this agreement shall hereafter rest upon the Boston and Providence Railroad Corporation and its lessee The New York, New Haven and Hartford Railroad Company.

Signed in behalf of the selectmen of Foxborough by the chairman thereunto duly authorized, and in behalf of the boards of directors of the railroad companies by the respective presidents thereunto duly authorized.

SELECTMEN OF FOXBOROUGH,

By EZRA C. COMEY,
Chairman.

BOSTON AND PROVIDENCE RAILROAD CORPORATION,

By PHILIP DEXTER,
President.

THE NEW YORK, NEW HAVEN AND HARTFORD
RAILROAD COMPANY,

By C. S. MELLEN,
President.

It is *Ordered*, That the approval of the Board be hereby given to the agreement and to the alteration therein set forth as necessary for the convenience and security of the public.

Attest: CHARLES E. MANN,

APRIL 20, 1907.

[6517]

Clerk.

Petition of the New York, New Haven and Hartford Railroad Company for approval of alteration in crossing of highway and railroad in New Bedford.

It appearing, after notice and hearing, that the board of aldermen of the city of New Bedford and the directors of the New York, New Haven and Hartford Railroad Company and of the Old Colony Railroad Company are of the opinion that it is necessary for the security and convenience of the public in connection with the proposed construction and operation of an additional track that an alteration be made in the crossing where Wamsutta street passes under the Old Colony railroad, leased to and operated by the New York, New Haven and Hartford Railroad Company; that they are agreed upon the character of the alteration to be made; and that an instrument in writing specifying the manner and limits within which said alteration shall be made, the party by whom the work shall be done, the general method of construction and the apportionment of cost, has been duly executed by the mayor of the city of New Bedford and by the presidents of the railroad corporations, a copy of which agreement is as follows:

AGREEMENT FOR ALTERATION OF A CROSSING OF HIGHWAY AND RAILROAD
IN THE CITY OF NEW BEDFORD, MASS.

Whereas by an order of the superior court dated October 9, 1906, the crossing of Wamsutta street, so called, in the city of New Bedford, and the Old Colony railroad, leased to and operated by the New York, New Haven and Hartford Railroad Company, is altered, and the grade of Wamsutta street is so changed as to carry said street underneath the railroad at the grade thereby established; and the directors of said railroad companies and the board of aldermen of said city are of the opinion that it is necessary for the security and convenience of the public that an alteration be made in said crossing by which an additional bridge shall be built over said street to carry an additional railroad track; and have agreed as to the alterations which should be made

Now therefore in pursuance of the provisions of the Acts of 1906, chapter 463, part I, section 41, this instrument in writing is made and signed on behalf of said city by the mayor, being duly authorized by the board of aldermen, and on behalf of said directors by the presidents of the respective railroad companies, thereunto duly authorized, specifying the manner and limits within which the alterations shall be made, and by which party the work shall be done, and general method of construction, and how the cost shall be borne.

Alterations in Highway.

There is to be no change in the grade of the street as established by said order of the superior court dated October 9, 1906, and said street is to be forty-five feet in width where proposed abutments and piers are to be built.

Bridge.

A bridge of steel shall be built to carry the railroad over said street with a clear height of thirteen feet six inches from the under side of the bridge to the center of the street; said bridge shall be supported upon suitable masonry abutments placed upon the side lines of said street, and masonry piers supporting steel columns within the curb lines of said street.

Plan.

The alterations herein described are shown upon a plan herewith entitled "N. Y. N. H. and H. R.R. Taunton Division, Plan showing proposed crossing of Wamsutta street and freight track of O. C. R.R. New Bedford, Mass., May 16, 1907."

Performance of the Work.

The New York, New Haven and Hartford Railroad Company shall furnish all the material and do all the work necessary to accomplish the above described alteration.

Apportionment of Cost.

The total cost of the alterations as aforesaid, including the cost of any necessary hearings, and the expenses of the Board of Railroad Commissioners and its necessary agents, shall be paid by the railroad companies.

Signed in behalf of the city of New Bedford by the mayor, duly authorized by the board of aldermen, and by the presidents of the Old Colony Railroad Company and The New York, New Haven and Hartford Railroad Company, being duly authorized by their respective directors.

CITY OF NEW BEDFORD

By CHARLES S. ASHLEY,
Mayor.

OLD COLONY RAILROAD COMPANY

By FAYETTE S. CURTIS,
President.

THE NEW YORK, NEW HAVEN AND HARTFORD
RAILROAD COMPANY

By C. S. MELLEN,
President.

It is *ordered*, That the approval of the Board be hereby given to the agreement and to the alteration therein set forth as necessary for the convenience and security of the public.

Attest: CHARLES E. MANN,
Clerk.

NOVEMBER 8, 1907.

[6769]

Petition of the New York, New Haven and Hartford Railroad Company for approval of alteration in crossing of highway and railroad in Pittsfield.

It appearing, after notice and hearing, that the board of aldermen of the city of Pittsfield and the directors of the New York, New Haven and Hartford Railroad Company and of the Berkshire Railroad Company are of opinion that it is necessary for the security and convenience of the public in connection with the proposed construction and operation of additional tracks that an alteration be made in the crossing where Mill street passes under the Berkshire railroad, leased to and operated by the New York, New Haven and Hartford Railroad Company; that they are agreed upon the character of the alteration to be made; and that an instrument in

writing specifying the manner and limits within which said alteration shall be made, the party by whom the work shall be done, the general method of construction and the apportionment of cost, has been duly executed by the mayor of the city of Pittsfield and by the presidents of the railroad corporations, a copy of which agreement is as follows:—

AGREEMENT FOR ALTERATION OF A CROSSING OF HIGHWAY AND RAILROAD IN THE CITY OF PITTSFIELD.

Whereas there is a certain crossing in the city of Pittsfield about fourteen hundred feet westerly from the Pittsfield passenger station of the Berkshire Railroad Company, leased to and operated by The New York, New Haven and Hartford Railroad Company, by which Mill street, so called, is carried underneath the railroad of said company; and the directors of said railroad companies and the board of aldermen of said city are of the opinion that it is necessary for the security and convenience of the public that an alteration be made in said crossing by which an additional bridge shall be built over said street to carry additional railroad tracks; and have agreed as to alterations which should be made:—

Now therefore in pursuance of the provisions of the Acts of 1906, chapter 463, part 1, section 41, this instrument in writing is made and signed on behalf of said city by the Mayor, being duly authorized by the board of aldermen, and on behalf of said directors by the presidents of the respective railroad companies, thereunto duly authorized, specifying the manner and limits within which the alteration shall be made, and by which party the work shall be done, and general method of construction, and how the cost shall be borne.

Alterations in Highway.

Said street is to be lowered one foot at a point where it passes under the north girder of proposed bridge over said street and from said point northwesterly the grade of said street shall ascend at the rate of seven feet in one hundred feet for a distance of about forty-five feet to where it intersects the present grade of said street. From said point under north girder of proposed bridge southeasterly the grade of said street shall descend at the rate of seven feet in one hundred feet for a distance of about thirty-eight feet, then at the rate of one foot in one hundred feet for a distance of about forty-five feet until it intersects the present grade of said street. There shall be suitable vertical curves at the intersections of the above described grades. Said street to be thirty-three feet wide where proposed extension of pier and abutment is to be built.

Bridge.

A new bridge of iron or steel shall be built to carry the railroad over said street with a clear height of thirteen feet six inches above the same. It shall be supported on a suitable abutment and pier of stone or concrete placed thirty-three feet apart at the grade of said street.

Plan.

The alterations hereinbefore described are shown upon a plan herewith entitled "N. Y. N. H. & H. R. R. Berkshire Division. Proposed additional sidetracks. Pittsfield Freight Yard. Pittsfield, Mass. Nov. 1906."

Performance of the Work.

The New York, New Haven and Hartford Railroad Company shall furnish all the material and do all the work necessary to accomplish the above described alteration.

Apportionment of Expenses.

The total cost of the alterations as aforesaid, including the cost of any necessary hearings, the expenses of the Board of Railroad Commissioners and its necessary agents, and all damages, shall be paid by The New York, New Haven and Hartford Railroad Company.

Signed in behalf of the city of Pittsfield by the Mayor duly authorized by the board of aldermen, and by the presidents of the Berkshire Railroad Company and The New York, New Haven and Hartford Railroad Company, being duly authorized by their respective directors.

CITY OF PITTSFIELD,

By ALLEN H. BAGG,
Mayor.

BERKSHIRE RAILROAD COMPANY,

By C. S. MELLEN,
President.

THE NEW YORK, NEW HAVEN AND HARTFORD
RAILROAD COMPANY.

By C. S. MELLEN,
President.

It is *Ordered*, That the approval of the Board be hereby given to the agreement and to the alteration therein set forth as necessary for the convenience and security of the public.

Attest:

CHARLES E. MANN,
Clerk.

JULY 31, 1907. [6637]

Designation of member of the Board for appointment on special commission.

In the matter of the alteration of the crossing of Springfield street and the tracks of the Central New England railroad in the town of Agawam, the Board, acting under the provisions of section 26, part 1, chapter 463, Acts of 1906, designates Clinton White, one of its members, for appointment by the Superior Court on a special commission to determine the questions named in said section.

For the Board,

CHARLES E. MANN,

FEBRUARY 8, 1907. [6444]

Clerk.

Designation of member of the Board for appointment on special commission.

In the matter of the alteration of the crossing of Concord street and the tracks of the Fitchburg railroad in the town of Maynard, the Board, acting under the provisions of section 26, part 1, chapter 463, Acts of 1906, designates George W. Bishop, one of its members for appointment by the Superior Court on a special commission to determine the questions named in said section.

For the Board,

CHARLES E. MANN,

FEBRUARY 8, 1907. [6300]

Clerk.

Designation of member of the Board for appointment on special commission.

In the matter of the alteration of a crossing of the New York, New Haven and Hartford railroad and a public way in the town of Chelmsford, the Board, acting under the provisions of sections 25 and 26, part I, chapter 463, Acts of 1906, designates George W. Bishop, one of its members, for appointment by the Superior Court on a special commission to determine the questions named in said sections.

For the Board,

CHARLES E. MANN,

MAY 28, 1907. [6571]

Clerk.

CAR HEATING.

RAILROAD.

Petition of the New York Central and Hudson River Railroad Company, lessee of the Boston and Albany railroad, for exemption from the law as to steam heating.

After consideration, — it is

Ordered, That the New York Central and Hudson River Railroad Company, lessee of the Boston and Albany railroad, for the period ending on the first day of October, 1908, be hereby exempted from the law requiring passenger cars to be heated by steam from the locomotive, in so far as such requirement would apply to passenger cars in trains upon the Webster and Athol branches of said railroad in which freight cars are placed between the locomotive and passenger cars; the passenger cars in such trains to be heated by the Baker or the Johnson heater heretofore approved by the Board.

Attest: ALLAN BROOKS,

SEPTEMBER 4, 1907. [6712]

Assistant Clerk.

Petition of the Central New England Railway Company for exemption from the law as to steam heating.

After consideration, — it is

Ordered, That the Central New England Railway Company be until the first day of October, 1908, hereby exempted from the law requiring passenger cars to be heated by steam from the locomotive in respect to passenger and baggage cars on mixed trains which leave Springfield at 7.48 A.M. and 3.45 P.M., and on the mixed train which reaches Springfield at 11.59 A.M., said cars to be heated by either the Baker or the Johnson heater heretofore approved by the Board.

Attest: CHARLES E. MANN,

DECEMBER 31, 1907. [6846]

Clerk.

STREET RAILWAY.

Circular.

It is hereby *Ordered*, That the requirement of the Board in respect to the heating of cars by street railway companies, made under date of August 1, 1895, pursuant to chapter 136, Acts of 1905 (now section 91, part III, chapter 463, Acts of 1906), be so modified and changed as to read as follows:

1. All box cars used by street railway companies for the transportation of passengers between the fifteenth day of October and the fifteenth day of April in each year shall be equipped with suitable apparatus for heating by electricity, unless other than electric heaters are specially authorized by the Board.

2. Every street railway company shall, during the period above named, whenever the outside temperature is less than forty degrees above zero (Fahrenheit) maintain, in all box cars in use for transporting passengers, an inside temperature, as nearly as may be, of not less than forty nor more than sixty degrees above zero, except at times when the company is temporarily prevented from so doing by storm, accident or other controlling emergency for which it is not responsible and which is not due to any negligence upon its part.

3. This order shall take effect immediately.

Attest: CHARLES E. MANN,
APRIL 2, 1907. [6403] Clerk.

Petition of the Connecticut Valley Street Railway Company for authority to install hot water heater for experimental purposes.

Upon the statement made by Mr. J. A. Taggart, Superintendent of the Connecticut Valley Street Railway Company, — it is

Ordered, That the Connecticut Valley Street Railway Company be hereby authorized to install in certain cars operated by it a hot water heater for the purpose of experimenting with this method of heating cars, this authority to continue until revoked.

For the Board,

JAMES F. JACKSON,
AUGUST 20, 1907. [6694] Chairman.

Petition of the Fitchburg and Leominster Street Railway Company for authority to install hot water heater for experimental purposes.

Upon the statement made by Mr. W. W. Sargent, superintendent of the Fitchburg and Leominster Street Railway Company, — it is
Ordered, That the Fitchburg and Leominster Street Railway Company be hereby authorized to install in certain cars operated by it a hot water heater for the purpose of experimenting with this method of heating cars, this authority to continue until revoked.

For the Board,

JAMES F. JACKSON,
Chairman.

JANUARY 10, 1907. [6434]

Petition of the Lexington and Boston Street Railway Company for authority to install hot water heater for experimental purposes.

After consideration, — it is

Ordered, That the Lexington and Boston Street Railway Company be hereby authorized to install in one of the cars operated by it a hot water heater for the purpose of experimenting with this method of heating cars, this authority to continue until revoked.

Attest: CHARLES E. MANN,
NOVEMBER 18, 1907. [6790] *Clerk.*

INVESTIGATION OF ACCIDENTS.

Finding of the Board on accident, August 29, 1907, on the Worcester and Southbridge street railway in Charlton.

On the twenty-ninth day of August a special car collided with a regular car upon the Worcester and Southbridge street railway. In the crash that followed the motorman of the regular car was fatally and the motorman of the special car seriously injured.

A conductor guessed at something about which he ought to have been sure, and, starting his car before another that he was to await had arrived, met it on the way in a head-on collision.

The safety of all who ride upon trains and cars demands that such a failure in duty receive its full measure of condemnation. Back of this fault of the employee, however, was inexcusable carelessness of men directly connected with and representing the management.

A special car which did not appear in the schedule of the day was to be run over a single track railway upon which other cars were moving at high speed. Such a movement ought never to be authorized without a clear understanding with both the motorman and the conductor of every car which can be affected by the change in schedule, and this understanding should be secured through recorded instructions. If this rule is enforced accidents will be less frequent, and when they do occur it will be easier to fix the responsibility for them.

The dispatcher knew what ought to have been done, but, because it was more convenient, contented himself with oral orders to the conductor of the special car, at a social entertainment the night before, amid surroundings that do not ordinarily help to impress upon the mind details of a duty to be performed the next day.

The testimony of the superintendent shows an utter lack of alertness and competent direction of affairs. While agreeing that under a telephone system of despatching cars an immediate record ought to be made of every order given and received, he acknowledges that this was not always done and that he had not insisted that it should be done.

Although this line of railway is equipped with block signals, they have been neglected and disregarded to such an extent as to seriously weaken their value as a safeguard.

Our finding is that while this accident was immediately due to the failure of an employee to obey an order, the careless way in which the order was given and a generally loose method of management made such failure possible if not probable.

JAMES F. JACKSON,
GEORGE W. BISHOP,
CLINTON WHITE,

SEPTEMBER 26, 1907. [6716]

Commissioners.

*Investigation of Accidents upon the Boston and Maine railroad in
Somerville and West Deerfield.*

The Board has made the following findings as the result of the investigation of two recent railroad accidents.

The rear end collision at West Deerfield on the twenty-ninth day of January was immediately due to the fact that a freight train followed too quickly, and against a rule of the road, a passenger train that had passed while the freight train was waiting upon a siding, and to the fact that the freight train was not under full control when going around the sharp descending curve upon which the passenger train had been most unexpectedly stopped in response to a train signal given in some way as yet undiscovered.

The advantage of a block signal at this place is apparent and such a signal ought to be installed as soon as may be in connection with other work of this kind already under way.

Upon the fourteenth day of February an express train which had been delayed in starting from Boston ran into the local train which had preceded it. The track was protected by a semaphore signal showing a green light which indicated the necessity for caution. The engineer claims that he did proceed cautiously, but that the collision took place owing to the obstruction of view and to the slippery condition of the rails. It is not necessary to determine whether the engineer did or did not exercise proper caution; the significant fact is that the discretion actually used led to disastrous results. A cautionary signal under such conditions leaves too large a responsibility upon the engineer.

Under the system of signals recommended a year ago by the Board and which was in process of installation at this place at the

time of the accident, the color shown would have been red, and in requiring the stopping of the train would have prevented the accident.

For the Board,

JAMES F. JACKSON,

MARCH 11, 1907. [6489]

Chairman.

STREET RAILWAY ACCIDENTS.

Circular Notice.

To the managements of the several companies operating street railways within this commonwealth:

Your attention is called to the findings of the Board in connection with several recent accidents upon street railways.

(1) While two cars were running quite closely together upon the Springfield street railway the trolley of the one in advance left the wire and the car came to a sudden stop. The car which was following ran into it.

In our opinion lights not maintained by the electric current ought to be carried at the rear end of all interurban cars.

This accident further demonstrates the meaning of an order issued by the Board about a year ago, which reads as follows:

Your attention is also called to a practice more or less general of locking the door leading from the body of the car into the front vestibule. The rule of companies to so limit the number of passengers in the front vestibule as to prevent interference with the motorman is approved, but any plan for carrying it out which involves the locking of this door so that it cannot be opened from the body of the car in case of need is disapproved.

The door into the front vestibule of the car which was run into here was locked and the rear vestibule of the car was crushed to such an extent as to prevent passengers from leaving at that end. The fact that no more serious consequences resulted in this instance does not lessen the blame that rests upon the management for disregarding the circular notice which it had received.

Upon its new cars the company has introduced a device for fastening the front door which does not prevent unlocking from the inside.

(2) The recent head-on collision between two street cars in Chicopee again proves the importance of a method of communication between those in charge of despatching cars and the crews of cars at different points upon the system.

In this instance an automatic electric signal failed to work. The accident was primarily due to the fact that the crew of one of the cars was acquainted with the defective working of this signal, while the crew of the other car was in ignorance of it. A telephone plant would have made communication possible between the crews of both cars and the despatching department in season to have avoided any accident. The installation of such a plant was begun upon this railway about a year ago and is now under way.

The need of some effective method of controlling the movement of cars has before been emphasized.

For the Board,

JAMES F. JACKSON,

FEBRUARY 16, 1907. [6485]

Chairman.

JOINT USE OF TRACKS.

Petition of the New York Central and Hudson River Railroad Company, lessee of the Boston and Albany railroad, for approval of contract between the Providence, Webster and Springfield Railroad Company and the Boston and Albany Railroad Company.

It appearing, after notice and hearing, that the terms of a contract executed by the Providence, Webster and Springfield Railroad Company and the Boston and Albany Railroad Company, providing that the latter shall perform all the transportation upon and over the road of the former company, are consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to the above named contract, a copy of which is on file in this office, under the provisions of section 67, part I, chapter 463, Acts of 1906, as amended by section 7, chapter 585, Acts of 1907.

Attest: CHARLES E. MANN,
JULY 22, 1907. [6628] Clerk.

Petition of the Boston and Northern Street Railway Company and of the Boston Elevated Railway Company for approval of agreement for use of tracks in East Boston.

It appearing, after notice and hearing, that the terms of the agreement executed by the Boston and Northern Street Railway Company and by the Boston Elevated Railway Company provide for a use of tracks in East Boston that is consistent with the public safety. — it is

Ordered, That the approval of the Board, under the provisions of section 36, part III, chapter 463, Acts of 1906, be hereby given to the above named agreement, a copy of which is on file in this office.

Attest: CHARLES E. MANN,
OCTOBER 25, 1907. [6756] Clerk.

Petition of the Boston and Worcester, the Newton and the Newton and Boston street railway companies for approval of agreement for use of tracks in the city of Newton.

It appearing, after notice and hearing, that the terms of the agreement executed by the Boston and Worcester Street Railway Company, the Newton Street Railway Company and the Newton and Boston Street Railway Company, providing for a use of tracks in the city of Newton, are consistent with the public safety, — it is

Ordered, That the approval of the Board be hereby given to the above named agreement, a copy of which is on file in this office, under the provisions of section 36, part III, chapter 463, Acts of 1906.

Attest: CHARLES E. MANN,

JULY 30, 1907.

[6640]

Clerk.

Petition of the Norton and Taunton Street Railway Company for approval of agreement for use of tracks with the Interstate Consolidated Street Railway Company in the town of Attleborough.

It appearing, after notice and hearing, that the terms of the agreement executed by the Interstate Consolidated Street Railway Company and the Norton and Taunton Street Railway Company provide for a use of tracks in the town of Attleborough that is consistent with the public safety, — it is

Ordered, That the approval of the Board be hereby given to the above named agreement, a copy of which is on file in this office, under the provisions of section 36, part III, chapter 463, Acts of 1906.

Attest: ALLAN BROOKS,

AUGUST 15, 1907.

[6669]

Assistant Clerk.

Petition of the South Middlesex Street Railway Company for approval of agreement for use of tracks with the Milford and Uxbridge Street Railway Company in the town of Framingham.

It appearing, after notice and hearing, that the terms of the agreement executed by the South Middlesex Street Railway Company and the Milford and Uxbridge Street Railway Company, providing for a use of tracks in the town of Framingham, are consistent with the public safety, — it is

Ordered, That the approval of the Board be hereby given to the above named agreement, a copy of which is on file in this office, under the provisions of section 36, part III, chapter 463, Acts of 1906.

Attest: CHARLES E. MANN,
JULY 30, 1907. [6641] Clerk.

Petition of the Springfield Street Railway Company and of the Western Massachusetts Street Railway Company for approval of authority for joint use of tracks in Springfield and West Springfield.

Upon consideration, it appearing that the terms of the agreement executed by the Springfield Street Railway Company and by the Western Massachusetts Street Railway Company provide for a use of tracks in the city of Springfield and town of West Springfield that is consistent with the public safety, — it is

Ordered, That the approval of the Board, under the provisions of section 36, part III, chapter 463, Acts of 1906, be hereby given to the exercise of the authority conferred under the agreement, a copy of which is on file in this office.

Attest: CHARLES E. MANN,
DECEMBER 14, 1907. [6835] Clerk.

Petition of the Taunton and Pawtucket Street Railway Company for approval of agreement for use of tracks with the Norton and Taunton Street Railway Company in Attleborough.

It appearing, after notice and hearing, that the terms of the agreement executed by the Taunton and Pawtucket Street Railway Company and by the Norton and Taunton Street Railway Company provide for a use of tracks in Attleborough that is consistent with the public safety, — it is

Ordered, That the approval of the Board, under the provisions of section 36, part III, chapter 463, Acts of 1906, be hereby given to the above named agreement, a copy of which is on file in this office.

Attest: CHARLES E. MANN,
OCTOBER 28, 1907. [6758] Clerk.

Petition of the Taunton and Pawtucket Street Railway Company for approval of agreement for use of tracks with the Interstate Consolidated Street Railway Company in Attleborough.

It appearing, after notice and hearing, that the terms of the agreement executed by the Taunton and Pawtucket Street Railway Company and by the Interstate Consolidated Street Railway Company provide for a use of tracks in Attleborough that is consistent with the public safety, — it is

Ordered, That the approval of the Board under the provisions of section 36, part III, chapter 463, Acts of 1906, be hereby given to the above named agreement, a copy of which is on file in this office.

Attest: CHARLES E. MANN,

OCTOBER 28, 1907.

[6757]

Clerk.

Petition of the Worcester and Southbridge and the Hartford and Worcester street railway companies for approval of operating contract between said companies.

It appearing, after notice and hearing, that the terms of a contract executed by the Hartford and Worcester Street Railway Company and by the Worcester and Southbridge Street Railway Company, providing that the latter company shall perform all the transportation over and upon the road of the former company during the period ending September 30, 1908, are consistent with the public interests, — it is

Ordered, That the approval of the Board be hereby given to the above named contract, a copy of which is on file in this office.

Attest: CHARLES E. MANN,

NOVEMBER 20, 1907.

[6794]

Clerk.

RAILROAD LOCATION.

Petition of the Boston, Cape Cod and New York Canal Company that the Board determine and prescribe the time when and the manner in which the Old Colony Railroad Company shall alter its location.

Upon the application of the Boston, Cape Cod and New York Canal Company made on the tenth day of May, 1907, that the Board determine and prescribe in writing the time when and the manner in which the Old Colony Railroad Company shall alter its location so as to cross the canal of the said canal company at such point or points as may be determined by the Joint Board of Railroad and Harbor and Land Commissioners under the provisions of chapter 448 of the Acts of 1899,

After due notice to all parties interested and full hearing in accordance therewith,

It appearing that the Joint Board above named has by an order made this day determined the points at which the said railroad shall cross the said canal as shown on plan on file in this office bearing the name of the said canal company and marked "Plan showing proposed change in location Old Colony Railroad near Buzzard's Bay July, 1906," — it is

Ordered, That the Old Colony Railroad Company alter its location so as to cross the said canal at the points so determined by locating its railroad at and near its Buzzard's Bay station in the town of Bourne and thence southerly and easterly and with the connection between the two lines of the said railroad south of Buzzard's Bay station as shown on the above named plan by red lines indicating the center of the new location and light blue lines indicating the sides thereof, except at the place of the said connection where the new location is shown as a triangle enclosed within the light blue lines outside of the red lines which indicate the center of the proposed new line of railroad; by abandoning so much of its present location near Buzzard's Bay station as lies within the location of the said canal company; also by locating its railroad near Bournedale station in the said town as shown

on the plan on file in this office bearing the name of the said canal company and marked "Plan showing proposed change in location Old Colony Railroad near Bournedale July 1906" by red lines indicating the center of the new location and light blue lines indicating the sides thereof; and by abandoning so much of its present location near Bournedale station as lies between the points where the said new location joins its present location. Said alterations of location shall be made agreeably to the provisions of the general law with regard to the laying out of railroads as far as the same are applicable thereto, and said railroad as thus relocated shall be carried over or under all highways and other ways which it may cross. The said alterations of location shall be made on or before the 15th day of October, 1907, unless hereafter otherwise ordered.

JAMES F. JACKSON,
GEORGE W. BISHOP,
CLINTON WHITE,

JUNE 3, 1907. [6559]

Commissioners.

Petition of the Boston, Cape Cod and New York Canal Company for determination of the time when the Old Colony Railroad Company shall alter its location.

Upon the representation of counsel for the Boston, Cape Cod and New York Canal Company, it is found that for good and sufficient reasons the work of relocating the Old Colony railroad in accordance with the order of this Board issued under date of June 3, 1907, has not been completed, and it is therefore

Decreed, That the time named for the completion of this work be extended to June 15, 1908, unless hereafter otherwise ordered.

Attest:

CHARLES E. MANN,

DECEMBER 10, 1907.

[6741]

Clerk.

ELECTRIC RAILROAD LOCATIONS.

Petition of the Boston and Providence Interurban Electric Railroad Company for designation of newspapers in which to advertise notice of hearing on fixing of route.

Under the provisions of section 6, chapter 516, Acts of 1906, the Board designates the Dedham Transcript as the newspaper in which the selectmen of Westwood shall give fourteen days' notice of the time and place of a hearing on the application of the Boston and Providence Interurban Electric Railroad Company that the route for its railroad be fixed through said town, and the Attleborough Sun as the newspaper in which the selectmen of Seekonk shall give fourteen days' notice of the time and place of a hearing on the application of said company that the route of its railroad be fixed through that town.

	Attest:	CHARLES E. MANN,
DECEMBER 9, 1907.	[6822]	Clerk.

STREET RAILWAY LOCATIONS—HIGHWAYS.

Petition of the Boston Elevated Railway Company for approval of plans relating to the construction of a subway in Cambridge.

Chapter 520, Acts of 1906, authorizes the Boston Elevated Railway Company to build a subway in Cambridge "under the supervision of the Board of Railroad Commissioners."

The Act requires the company to apply to the board for approval of plans showing the proposed route, "the general form and method of construction, with the location of proposed tracks and stations and approaches."

It further provides that in locating stations the action of the company shall be "subject to the approval of the mayor."

According to our view of the law the duty of the Board to exercise a general supervision over this undertaking requires that it deal as fully and effectively with stations and approaches as with any of the features of the plans which have been submitted. Such is the express language of the statute.

This view overrules the claim of the city solicitor that the mayor of Cambridge has absolute and exclusive authority over the location of stations.

It also overrules the contention of the company which in claiming that the real location of stations comes before the Board only in case the company appeals from the decision of the mayor renders our approval of the original plans practically meaningless as far as stations are concerned, or leads to the equally objectionable theory that the statute provides for an appeal to a tribunal that has already passed upon the question at issue.

Moreover, it is doubtful, to say the least, whether a decision of the mayor upon the location of stations and approaches can be considered in the light of the other provisions of this act the "determination" of a question "arising in the course of the subway work."

The plans that have been submitted indicate the two points at which the company desires to locate stations, while the communica-

tion of the mayor to the company indicates the five places at which he desires that stations be located.

This as yet inchoate attempt at locating stations may be perfected in the course of the hearing upon the merits of the matter. The Board will appoint for such hearing the tenth day of October at eleven o'clock in the forenoon.

For the Board,

JAMES F. JACKSON,

SEPTEMBER 28, 1907. [6651]

Chairman.

Petition of the Boston Elevated Railway Company for approval of plans showing proposed location of elevated railway from Lechmere square in Cambridge to the existing elevated structure in Causeway street in Boston.

The annexed plans, numbered 26869 to 26877 inclusive and 25221, showing proposed form and method of construction and location of the tracks, elevated structure and station of the Boston Elevated railway from Lechmere square in Cambridge to the existing elevated structure in Causeway street in Boston and to a connection with the Boston subway and Washington street tunnel, are hereby approved.

JAMES F. JACKSON,
GEORGE W. BISHOP,
CLINTON WHITE,

NOVEMBER 27, 1907. [6611]

Commissioners.

Petition of the Boston Elevated Railway Company for approval of plans showing proposed siding or connection in Washington street in Boston.

The annexed plans, numbered 25220 and 26192, showing proposed location and form and method of construction of siding or connection of the Boston Elevated railway on Washington street between Hawthorne avenue and Dudley street in the city of Boston, said siding or connection to be an extension of the existing siding between Hawthorne avenue and Guild street, said plans being modifications or changes of plans numbered 25021 and 25022, approved

by the Board July 11, 1898; of amended plans numbered 25021 and 25022, approved by the Board January 20, 1899, and of amended plan numbered 25450, approved by the Board April 18, 1899, are hereby approved and consent given to the changes shown.

JAMES F. JACKSON,
GEORGE W. BISHOP,
CLINTON WHITE,

MARCH 6, 1907. [6220]

Commissioners.

Petition of the Boston Elevated Railway Company for approval of plans showing proposed location of its elevated railway in Boston on Washington street near Forest Hills.

Of the annexed plans, those numbered 26187, 26188, 26189 and 26190, showing proposed location of tracks, form and method of construction of the Boston elevated railway in the city of Boston, on Washington street from near Union avenue to near Woodside avenue and from Williams street to the Arborway, the same being modifications of plans numbered 26176, 26178, 26179 and 26180, approved by the Board June 21, 1905, are hereby approved, consent being given to the changes shown. Plan numbered 26191, showing location on Washington street from the Arborway to Tower street, including loop over private property on Washington street between Morton and Tower streets, being a modification of plan numbered 26181, approved by the Board June 21, 1905, is disapproved.

JAMES F. JACKSON,
GEORGE W. BISHOP,
CLINTON WHITE,

SEPTEMBER 10, 1907. [6219]

Commissioners.

Petition of the Boston and Worcester Street Railway Company for approval of location in Natick.

The action of the Legislature in enacting the electric railroad law and the subsequent action of this Board in granting under it a certificate of exigency to the Boston and Providence Interurban Electric Railroad Company have established beyond question a state policy which approves the fast electric interurban railway.

With it must necessarily come branch lines connecting with cities and towns along the route. The fact that the Boston and Provi-

dence Interurban would bring the benefit of such connection with communities along its route was one of the features which made that enterprise preferable to the undertaking of the Boston and New York Electric Railroad Company.

The Boston and Worcester street railway was a forerunner of these electric railroads and the people of Natick have desired a branch connection with it in order to secure the quicker transit to and from Boston. The construction of that branch may to some extent affect the patronage of the existing line which now serves Natick and other communities, but it cannot be said that the result of building and operating the new line will be such a loss to existing lines as to make the net outcome harmful to the public interests.

In view of that fact the Board must certify that the location granted to the Boston and Worcester Street Railway Company under the order of the selectmen of Natick, dated July 5, 1905, as shown upon the plan accompanying the petition, is consistent with the public interests.

JAMES F. JACKSON,
GEORGE W. BISHOP,

NOVEMBER 30, 1907.

[5896]

Commissioners.

Certificate — highways.

After notice and hearing and full consideration, — it is

Ordered, That the Board hereby certify that the location for the tracks of the Boston and Worcester street railway in Worcester, Bacon, Middle, Harvard and Sawin streets, North avenue, Washington, East Central and Park streets in the town of Natick, established under an order of the selectmen of said town dated July 5, 1905, a copy of which order, with accompanying plans, approved July 5, 1905, is on file in this office, is consistent with the public interests.

Attest:

CHARLES E. MANN,

NOVEMBER 30, 1907.

[5896]

Clerk.

Certificate — private land.

It appearing, after notice and hearing, that the petitioner has been authorized to construct and maintain a street railway in the town of Natick, and has received a location for the tracks of its railway therein; that in order to avoid undesirable grades and

curves and for other purposes incidental to the use of the highways the public necessity and convenience demand that a portion of the railway of the petitioner be constructed and maintained upon private land; and that the consent of the selectmen of said town to the proposed plan of construction has been duly obtained,— it is

Ordered, That the petitioner be hereby authorized to construct and maintain its railway upon private land within said town, as particularly described upon a plan on file with the petition.

Attest: CHARLES E. MANN,
NOVEMBER 30, 1907. [5896] Clerk.

Petition of the selectmen of Framingham for approval of alteration of location of the Boston and Worcester street railway in Framingham.

The proposed change in location would, in our opinion, create conditions less favorable for the proper operation of the railway and for the most advantageous uses of the highway than those which exist under the present location. In view of this finding, it is

Ordered, That the petition be dismissed.

For the Board,
CHARLES E. MANN,
JULY 18, 1907. [6390] Clerk.

Petition of the New Bedford and Onset Street Railway Company for approval of location in Marion.

The location which the company presents is to be used in connecting its railway with the premises in Marion where it is engaged in receiving and delivering merchandise. The remonstrants do not question the need of better facilities, but fear that the development of the freight business at this point will be detrimental to a neighborhood in which there is much local pride.

It is doubtful whether the legislature ever intended that the state board should overrule selectmen upon a matter of such purely local concern. Assuming, however, that the power exists, there seems to be no occasion to exercise it in this instance.

The company assures us that the changes which it has in view will in no way tend to make the neighborhood less attractive, but on the contrary will improve existing conditions, and it is difficult to conceive of any change that would not be an improvement upon the present freight shed and its surroundings.

In view of the manifest advantages of a larger accommodation for the shipment and receipt of merchandise at this point and in the belief that harmful consequences from the conduct of the business in an objectionable manner can be prevented through state supervision as well as through the power to revoke the location, the Board will issue its certificate that the location is consistent with the public interests.

For the Board,

JAMES F. JACKSON,

MARCH 13, 1907. [6199]

Chairman.

Certificate.

It is

Ordered, That the Board hereby certify that the location for the tracks of the New Bedford and Onset street railway in Spring street in the town of Marion, established under an order of the selectmen of said town dated June 21, 1906, as subsequently amended, copies of which order and amendment, with accompanying plan, are on file in this office, is consistent with the public interests.

Attest:

ALLAN BROOKS,

MARCH 13, 1907. [6199]

Assistant Clerk.

Under the provisions of chapter 399 of the Acts of 1902, (now Section 7, Part III, Chapter 463, Acts of 1906) the Board has during the period covered by this report issued many additional certificates that the locations or alterations of locations for the tracks of various street railway companies granted by local authorities were consistent with the public interests. Under prior legislation it has also approved locations granted street railway companies in the city of Boston, the city of Cambridge and the town of Brookline.

Appended is a list of such additional highway locations granted to various street railway companies and approved by the Board:—

Berkshire Street Railway Company.

Egremont, April 24, 1907 — Location in certain highways, established under an order of the selectmen dated January 4, 1907, as amended by an order dated January 24, 1907. [6440]

Great Barrington, April 24, 1907 — Location in certain highways, established under an order of the selectmen dated January 3, 1907, as amended by orders dated February 18, 1907 and March 7, 1907. [6441]

Pittsfield, November 13, 1907 — Location in East street, established under an order of the board of aldermen dated October 7, 1907. [6767]

Sheffield, April 24, 1907 — Location in certain highways, established under an order of the selectmen dated January 3, 1907. [6439]

Boston and Northern Street Railway Company.

Andover, September 11, 1907 — Location in Main street, established under an order of the selectmen dated June 14, 1907, and a permit of the Massachusetts Highway Commission dated August 5, 1907. [6688]

Beverly, May 24, 1907 — Location in Elliott street, established under an order of the board of aldermen dated September 18, 1906, as amended by order dated December 18, 1906. [6557]

Beverly, May 24, 1907 — Relocation in Rantoul, Cabot, Elliott, Pond and Federal streets, established under an order of the board of aldermen dated May 21, 1907. [6569]

Beverly, August 15, 1907 — Relocation of tracks in the state highway, locally known as Cabot and Dodge streets, established under a decree of the Massachusetts Highway Commission dated July 26, 1907. [6672]

Chelsea, January 28, 1907 — Location and alteration of location in Washington avenue, established under an order of the board of aldermen dated January 3, 1907. [6432]

Everett, March 27, 1907 — Location and relocation in Woodlawn avenue, established under an order of the board of aldermen dated June 11, 1906. [6180]

Gloucester, July 5, 1907 — Relocation in Western avenue, established under an order of the board of aldermen dated June 19, 1907. [6613]

Gloucester, December 6, 1907 — Relocation in Essex avenue, established under an order of the board of aldermen dated November 6, 1907. [6810]

Haverhill, December 12, 1907 — Relocation in the state highway, established under an order of the Massachusetts Highway Commission dated November 26, 1907. [6820]

Ipswich, June 19, 1907 — Location and relocation in High street, established under an order of the selectmen dated May 31, 1907. [6584]

Ipswich, June 19, 1907 — Location and relocation in Central street and Market square, established under an order of the selectmen dated May 31, 1907. [6585]

Lawrence, November 23, 1907 — Location in Howard and Allston streets, established under an order of the board of aldermen dated September 23, 1907. [6799]

Lynn, January 18, 1907 — Location in Blossom, Summer and Market streets, established under an order of the board of aldermen dated December 4, 1906. [6400]

Lynn, January 18, 1907 — Location in Broadway, established under an order of the board of aldermen dated November 28, 1906. [6401]

Lynn, April 9, 1907 — Relocation in Essex street and Eastern avenue, established under an order of the board of aldermen dated March 7, 1907. [6513]

Marblehead, November 23, 1907 — Relocation in Pleasant and Washington streets, established under an order of the selectmen dated October 28, 1907. [6796]

Lowell, May 17, 1907 — Location and relocation in First street, established under an order of the board of aldermen dated April 23, 1907. [6554]

Malden, July 5, 1907 — Relocation in Ferry street, established under an order of the board of aldermen dated June 18, 1907. [6618]

Malden, October 14, 1907 — Relocation in Salem street near Cross street, established under an order of the board of aldermen dated September 17, 1907. [6733]

Methuen, December 12, 1907 — Relocation in the state highway, established under an order of the Massachusetts Highway Commission dated November 26, 1907. [6820]

Peabody, August 15, 1907 — Location and alteration of location in Washington street, established under an order of the selectmen dated July 23, 1907. [6680]

Reading, September 11, 1907 — Location in Main street, established under an order of the selectmen dated May 22, 1907, and a permit of the Massachusetts Highway Commission dated August 5, 1907. [6689]

Rockport, June 28, 1907 — Relocation in Broadway, Mt. Pleasant and Main streets, established under an order of the selectmen dated May 23, 1907. [6599]

Salem, January 18, 1907 — Location in Webb and Webster streets, established under an order of the board of aldermen dated December 1, 1906. [6399]

Salem, November 14, 1907 — Relocation in Charter street between Elm and Derby streets, established under an order of the board of aldermen dated October 24, 1907. [6783]

Winchester, December 6, 1907 — Relocation in Washington street, established under an order of the selectmen dated October 28, 1907. [6805]

Boston and Revere Electric Street Railway Company.

Boston (East Boston), December 6, 1907 — 7th location, cross-over connection in Bennington street near Leyden street, and two crossover connections in Walley street near Gladstone street, established under an order of the board of aldermen dated November 11, 1907. [6808]

Boston and Worcester Street Railway Company.

Framingham, March 21, 1907 — Location in Eastern avenue, established under an order of the selectmen dated February 16, 1907. [6490]

Framingham, March 27, 1907 — Location and alteration of location in Worcester street, established under an order of the selectmen dated February 27, 1907, amended March 25, 1907. [6491]

Framingham, March 27, 1907 — Location and alteration of location in Central square, Main, Pleasant and Worcester streets, established under an order of the selectmen dated February 27, 1907, amended March 25, 1907. [6492]

Framingham, December 12, 1907 — Location and relocation in Worcester street, established under an order of the selectmen dated December 5, 1907. [6826]

Southborough, June 27, 1907 — Location for a turnout in the New Road to Marlborough, established under an order of the selectmen dated June 19, 1907. [6604]

Southborough, June 27, 1907 — Location and alteration of location in Worcester street, established under an order of the selectmen dated June 19, 1907. [6605]

Citizens Electric Street Railway Company.

Newburyport, July 18, 1907 — Location for a turnout on Storey avenue in the city of Newburyport, established under an order of the board of aldermen dated June 19, 1907. [6635]

Dartmouth and Westport Street Railway Company.

Westport, July 30, 1907 — Location and alteration of location in the highway between New Bedford and Fall River, established under an order of the selectmen dated July 9, 1907. [6638]

Haverhill and Southern New Hampshire Street Railway Company.

Haverhill, May 22, 1907 — Location in Broadway, established under an order of the board of aldermen dated April 9, 1907. [6552]

Holyoke Street Railway Company.

Chicopee, June 7, 1907 — Relocation in Chicopee street, established under an order of the board of aldermen dated May 8, 1907. [6575]

Holyoke, May 22, 1907 — Locations in High, Sargeant, Maple and Cabot streets and extension of turnout of the Elmwood line southwest of Jackson street, established under an order of the board of aldermen dated April 16, 1907. [6548]

Holyoke, July 5, 1907 — Location for a turnout in Brown avenue, established under an order of the board of aldermen dated June 4, 1907. [6588]

Interstate Consolidated Street Railway Company.

Attleborough, January 18, 1907 — Locations in County street and in North Main and Elizabeth streets, established under orders of the selectmen dated December 1, 1906. [6396]

Attleborough, August 6, 1907 — Location in County street, Thacher street, the new highway from Thacher street to West street, and West street, established under an order of the selectmen dated July 12, 1907. [6648]

North Attleborough, March 14, 1907 — Location in Washington street, established under an order of the selectmen dated March 6, 1907. [6397]

North Attleborough, March 20, 1907 — Location in Washington and Park streets, established under an order of the selectmen dated February 6, 1907. [6486]

Lawrence and Methuen Street Railway Company.

Lawrence, March 20, 1907 — Relocation in Hampshire street, established under an order of the board of aldermen dated October 22, 1906. [6496]

Lexington and Boston Street Railway Company.

Lexington, June 28, 1907 — Location for poles on Massachusetts avenue between the Arlington-Lexington line and Lexington Centre, established under an order of the selectmen dated May 27, 1907. [6602]

Linwood Street Railway Company.

Northbridge, September 26, 1907 — Location in Main street, established under an order of the selectmen dated July 23, 1907. [6708]

Lowell and Fitchburg Street Railway Company.

Chelmsford, March 12, 1907 — Location in West Chelmsford and Groton roads, established under an order of the selectmen dated November 19, 1906, and amended March 4, 1907. [6363]

Middlesex and Boston Street Railway Company.

Natick, November 14, 1907 — Location in Union street, established under an order of the selectmen dated October 28, 1907. [6779]

Natick, November 14, 1907 — Location in Eliot and Water streets, established under an order of the selectmen dated October 28, 1907. [6785]

Milford and Uxbridge Street Railway Company.

Holliston, March 27, 1907 — Relocation in the state highway, established under a decree of the Massachusetts Highway Commission dated January 8, 1907. [6457]

Holliston, June 28, 1907 — Relocation in the state highway, established under a decree of the Massachusetts Highway Commission dated June 4, 1907. [6596]

Holliston, October 14, 1907 — Relocation in the state highway, established under a decree of the Massachusetts Highway Commission dated September 3, 1907. [6727]

Nahant and Lynn Street Railway Company.

Nahant, May 9, 1907 — Location in Castle road and Great Marsh road, established under an order of the selectmen of said town dated March 15, 1906. [6102]

Natick and Cochituate Street Railway Company.

Natick, July 25, 1907 — Relocation in North Main street, established under an order of the selectmen dated May 29, 1907. [6612]

Natick, November 14, 1907 — Relocation in North Main street between Felchville and North Natick, established under an order of the selectmen dated October 28, 1907. [6784]

Natick, November 15, 1907 — Relocation in North Main street from the foot of Felchville Hill to a point three hundred feet north of Pleasant street, established under an order of the selectmen dated October 28, 1907. [6778]

New Bedford and Onset Street Railway Company.

Marion, March 13, 1907 — Location in Spring street, established under an order of the selectmen dated June 21, 1906, as subsequently amended. [6199]

Mattapoisett, April 9, 1907 — Location on the state highway, established under an order of the selectmen dated March 18, 1907. [6523]

Newton Street Railway Company.

Newton, June 19, 1907 — Location in Washington street at Nonantum square, established under an order of the board of aldermen dated May 27, 1907. [6590]

Newton, June 28, 1907 — Relocation of poles at the corner of Commonwealth avenue and Washington street and at the corner of Commonwealth avenue and Lexington street, established under an order of the board of aldermen dated May 27, 1907. [6601]

Newton, July 17, 1907 — Location in Centre street, established under an order of the board of aldermen dated May 6, 1907. [6626]

Newton, November 1, 1907 — Location for a curved track in Centre street opposite Crescent avenue, established under an order of the board of aldermen dated October 7, 1907. [6753]

Newton, November 1, 1907 — Location and alteration of location in Centre street near Trowbridge street, established under an order of the board of aldermen dated October 7, 1907. [6755]

Waltham, December 12, 1907 — Relocation in Main street at Weston street and in Main street near Prospect street, established under an order of the board of aldermen dated November 11, 1907. [6818]

Norfolk and Bristol Street Railway Company.

Walpole, November 1, 1907 — Relocation of tracks in Main street, established under an order of the selectmen dated October 18, 1907. [6764]

Northampton Street Railway Company.

Northampton, August 15, 1907 — Location in Elm street, established under an order of the board of aldermen dated August 5, 1907. [6685]

Norton and Taunton Street Railway Company.

Attleborough, April 9, 1907 — Location in Pleasant and Park streets, established under an order of the selectmen dated March 4, 1907. [6526]

Old Colony Street Railway Company.

Abington, July 30, 1907 — Relocation of tracks in North avenue between Adams and Railroad streets, established under an order of the selectmen dated June 12, 1907. [6639]

Brockton, September 11, 1907 — Location in North Montello street, established under an order of the board of aldermen dated August 12, 1907. [6705]

East Bridgewater, April 9, 1907 — Location in Matfield street, established under an order of the selectmen dated March 11, 1907. [6514]

Hingham, January 18, 1907 — Location in Fresh River avenue, established under an order of the selectmen dated September 10, 1906, and location and alteration of location in Rockland street, established under an order of the selectmen dated September 4, 1906. [6402]

Holbrook, March 20, 1907 — Relocation in Franklin street, established under an order of the selectmen dated February 19, 1907. [6499]

Quincy, August 15, 1907 — Location and alteration of location in Hancock, Temple and Washington streets, established under an order of the city council dated June 18, 1907. [6673]

Quincy, November 7, 1907 — Location in Chubbuck street, Des Moines road, East Howard street and Washington street, established under an order of the city council dated September 9, 1907. [6759]

Somerset, September 11, 1907 — Location in Dublin street, South street and Riverside avenue, established under an order of the selectmen dated July 31, 1907, and a permit of the Massachusetts Highway Commission dated June 6, 1907. [6690]

Stoughton, April 9, 1907 — Locations and relocations in Park street, established under an order of the selectmen dated March 1, 1907. [6515]

Providence and Fall River Street Railway Company.

Swansea, July 30, 1907 — Location for two turnouts in the state highway, established under an order of the selectmen dated July 16, 1907. [6656]

Shelburne Falls and Colrain Street Railway Company.

Buckland, September 23, 1907 — Location established under an order of the selectmen dated June 22, 1907. [6642]

Springfield Street Railway Company.

Longmeadow, February 25, 1907 — Location established under an order of the selectmen dated January 16, 1907. [6467]

Springfield, March 21, 1907 — Locations and relocations in Court and Main streets, in State street and St. James avenue, in Belmont avenue; in Main and Lyman streets, in North Main and Wason avenue, in State and Walnut streets, in State and Main streets and in Worthington street, established under an order of the board of aldermen dated January 3, 1907, as subsequently amended. [6454]

Springfield, November 14, 1907 — Location in King street, established under an order of the board of aldermen dated October 28, 1907. [6775]

Springfield, November 29, 1907 — Locations at Main and Lyman streets and at Main and State streets, established under an order of the board of aldermen dated October 8, 1907. [6776]

Taunton and Pawtucket Street Railway Company.

Attleborough, April 9, 1907 — Location in Emory and Pleasant streets, established under an order of the selectmen dated March 2, 1907. [6524]

Attleborough, April 9, 1907 — Location in Emory, Pleasant and Park streets, established under an order of the selectmen dated March 2, 1907. [6525]

Union Street Railway Company.

Fairhaven, January 4, 1907 — Location in Main street, established under an amended order of the selectmen dated November 19, 1906. [6378]

Fairhaven, March 27, 1907 — Location for a turnout in Washington street, established under an order of the selectmen dated March 2, 1907. [6501]

New Bedford, June 27, 1907 — Location for a turnout in Kempton street, established under an order of the board of aldermen dated June 12, 1907. [6609]

New Bedford, June 27, 1907 — Location and relocation in Weld and Purchase streets, established under an order of the board of aldermen dated June 12, 1907. [6610]

West End Street Railway Company.

Arlington, April 9, 1907 — Permission to attach wires to ten poles of the Edison Electric Illuminating Company on Henderson street, established under an order of the selectmen and board of public works granted December 24, 1906. (23-8) [6506]

Boston, April 9, 1907 — 262nd location, double curved tracks, crossovers, switches and connections at the northwest corner of Dorchester avenue and West Fourth street, South Boston, established under an order of the board of aldermen dated January 5, 1907;

Permission to attach wires to seven poles of the New England Telephone and Telegraph Company and to eight poles of the Edison Electric Illuminating Company on L street, established under an order of the board of aldermen dated December 31, 1906. [6506]

Boston, May 29, 1907 — 261st location, extension of time to December 31, 1907, for completing work, as granted by the board of aldermen in an order dated March 4, 1907;

246th, 247th, 249th, 253rd, 255th locations, extension of time to April 8, 1908, for completing work, as granted by the board of aldermen in an order dated April 8, 1907;

263rd location, double curved tracks at southwest corner of Dorchester avenue and West Fourth street, South Boston, established under an order of the board of aldermen dated April 8, 1907;

264th location, double curved tracks from the north and from the south, connecting existing tracks on Washington street, West Roxbury; also cross connection on Washington street, south of Lotus place, established under an order of the board of aldermen dated April 8, 1907. [6561]

Boston, June 19, 1907 — 265th location, single track in Battery street between Commercial street and the North Ferry, established under an order of the board of aldermen dated May 6, 1907;

266th location, alteration of tracks in Congress, State and Devonshire streets, established under an order of the board of aldermen dated May 13, 1907;

267th location, alteration of tracks in Washington street, Haymarket square and Canal street, established under an order of the board of aldermen dated May 13, 1907;

268th location, double curved tracks on Dorchester avenue south of Richmond street, Dorchester, from and connecting with existing tracks to the Milton car-house yard; also two cross connections on Dorchester avenue south of Richmond street, established under an order of the board of aldermen dated May 27, 1907. [6589]

Boston, July 5, 1907 — 269th location, second track on Saratoga street, East Boston, from and connecting with the southerly of the existing tracks at Bremen street to and connecting with the southerly of the existing tracks east of the Boston and Albany railroad bridge, established under an order of the board of aldermen dated June 10, 1907. [6620]

Boston, July 17, 1907 — 270th location, curved tracks on Ipswich street from Boylston street to Boylston street, established under an order of the board of aldermen dated June 24, 1907. [6631]

Boston, October 25, 1907 — 271st location, third track in Huntington avenue from west of Gainsboro street to west of Parker street, established under an order of the board of aldermen dated September 25, 1907;

272nd location, double tracks in Bennington street, East Boston, from and connecting with the existing tracks in Saratoga street to and connecting with the tracks of the Boston and Northern Street Railway Company in Bennington street, established under an order of the board of aldermen dated September 25, 1907. [6748]

Cambridge, May 29, 1907 — Location for third track on northerly side of Mt. Auburn street near the car house, single curved tracks and cross connection on said street; double tracks on Belmont street from Mt. Auburn street to a point west of Holworthy street,

established under an order of the board of aldermen of said city dated April 2, 1907. (59-2) [6561]

Cambridge, October 25, 1907 — Permission to erect fifteen poles on Brookline street between Massachusetts avenue and Granite street, established under an order of the board of aldermen dated September 24, 1907. [6748]

Malden, April 27, 1907 — Location for double tracks in Broadway from Eastern avenue to the Melrose line and for a single track on the southerly side of Salem street from Lebanon street to Broadway, established under an order of the board of aldermen of said city dated March 5, 1907. [6527]

Malden, May 29, 1907 — Location for double tracks and cross connections on Eastern avenue and Lynn street, established under an order of the board of aldermen of said city dated April 30, 1907. [6561]

Malden, July 30, 1907 — Relocation of tracks on Lebanon street from Salem street to the Melrose line, established under an order of the board of aldermen dated July 2, 1907. [6652]

Newton, May 29, 1907 — Location for additional cross connection on Centre street at Pearl street, established under an order of the board of aldermen of said city dated May 6, 1907. [6561]

Medford, June 19, 1907 — Location for double tracks across Salem street, from and connecting with the proposed tracks in Fellsway West, and single curved track at the northwest corner of Salem street and Fellsway West, established under an order of the board of aldermen dated April 23, 1907. (23-6) [6589]

Medford, July 30, 1907 — Location for double tracks on Myrtle street from and connecting with the proposed tracks in Middlesex Fells parkway to and connecting with proposed tracks on Quincy street in Malden, established under an order of the board of aldermen dated July 2, 1907. [6652]

Medford, September 21, 1907 — Relocation of existing double tracks in College avenue, Boston avenue and High street, established under an order of the board of aldermen dated September 3, 1907. [6718]

Somerville, April 9, 1907 — Location for two poles on Broadway, established under an order of the board of aldermen dated December 13, 1906. (58-4) [6506]

Somerville, May 29, 1907 — Location for underground conduits in Broadway, from the Boston boundary line to Grant street, established under an order of the board of aldermen of said city dated April 11, 1907. (59-4) [6561]

Somerville, July 30, 1907 — Location for one pole on Cross street, north of Oliver street, established under an order of the board of aldermen dated July 11, 1907. [6652]

Somerville, August 15, 1907 — Location and rights for double tracks in Mystic avenue from the dividing line between the city of Boston and city of Somerville to the Fells parkway, established under orders of the board of aldermen dated July 25, 1907. [6677]

Somerville, October 31, 1907 — Location for single curved tracks in College avenue at Broadway and at the Medford line, established under an order of the board of aldermen dated October 24, 1907; and electric rights on above location, established under an order of the board of aldermen dated October 24, 1907. [6772]

Watertown, June 28, 1907 — Location for a single curved track from and connecting with the existing tracks on Arsenal street to land of the company on Arlington street, and cross connection on Arsenal street east of Coolidge avenue, established under an order of the selectmen adopted June 14, 1907. [6606]

Watertown, October 25, 1907 — Location for double tracks in Galen street from Main street to south of Water street; double curved tracks in Galen street; and additional track in Main street connecting the existing track east of Galen street with the track of the Newton Street Railway Company, and cross connection in Main street, established under an order of the selectmen dated September 20, 1907. [6748]

Western Massachusetts Street Railway Company.

Westfield, September 9, 1907 — Location in Main street, established under an order of the selectmen dated July 30, 1907. [6675]

Worcester Consolidated Street Railway Company.

Worcester, July 3, 1907 — Location in Salisbury and West streets, established under an order of the board of aldermen dated May 27, 1907. [6608]

Worcester, July 30, 1907 — Relocation of tracks in Shrewsbury street, established under an order of the board of aldermen dated July 8, 1907. [6657]

Worcester and Blackstone Valley Street Railway Company.

Northbridge, July 3, 1907 — Location in the main highway at Plummers Corner, established under an order of the selectmen dated June 19, 1907. [6607]

Worcester and Providence Street Railway Company.

Millbury, Sutton, Douglas, Uxbridge, March 5, 1907 — Location and relocation in Millbury, established under an order of the selectmen dated November 22, 1906, and locations in Sutton, Douglas and Uxbridge, established under orders of the selectmen dated September 21, 1906, October 6, 1906, and July 18, 1906, respectively. [6469]

STREET RAILWAY LOCATIONS — PRIVATE LAND.

Under the provisions of general laws the Board has during the year granted authority to various street railway companies to construct their railways in part upon private land for the purpose of avoiding undesirable grades and curves in the public highway and for other purposes incidental to the use of these highways, or avoiding the crossing of the railway with a steam railroad, these orders being based in each case upon evidence that public necessity and convenience demanded such action. A summary of these orders follows: —

Berkshire Street Railway Company.

Egremont, April 24, 1907 — For purposes incidental to the use of the highway. [6440]

Great Barrington, April 24, 1907 — To avoid undesirable grades and curves in the highways. [6441]

Sheffield, April 24, 1907 — To avoid undesirable grades and curves in the highways. [6439]

Linwood Street Railway Company.

Northbridge, September 26, 1907 — To avoid undesirable grades and curves. [6708]

Nahant and Lynn Street Railway Company.

Nahant, May 9, 1907 — To secure a more convenient terminus. [6102]

New Bedford and Onset Street Railway Company.

Mattapoisett, April 9, 1907 — For purposes incidental to the use of the highway. [6523]

Middleborough, January 26, 1907 — Turnout relocated on private land. [6339]

Western Massachusetts Street Railway Company.

Westfield, September 9, 1907 — For constructing a turnout for the temporary storage of cars. [6675]

Worcester and Providence Street Railway Company.

Millbury, Sutton, Douglas, Uxbridge, March 5, 1907 — To avoid undesirable grades and curves in the highways. [6469]

RAILROAD LOCOMOTIVES.

SMOKE FROM LOCOMOTIVE ENGINES.

Special Report.

The exasperating nature of the annoyance to persons and injury to property occasioned by dense black smoke from locomotives along busy lines of railroad that pass through thickly settled communities cannot be questioned and demands prompt relief. The situation has grown more acute with the increase in number, speed and load of trains, the construction of new stations and the building of new blocks and houses upon lands adjacent to railroad premises. Indifference to this grievance would be inexcusable, and the most earnest effort to remove it is to be expected.

As soon as it became apparent that proposed legislation on this subject would fail of enactment, the Board undertook an investigation based upon the complaints presented by occupants and owners of estates adjacent to the Boston and Albany railroad. While this inquiry is not yet completed, certain conclusions have been reached that may be stated.

1. It is practically beyond question that soft coal of high grade is the fuel best adapted for the fast and heavy train service of our railroads. Were hard coal as efficient for the purpose the demand for it to meet other paramount needs already threatens the supply.

2. Repeated failures have created a general scepticism as to future success in the attempt to produce a satisfactory smoke consuming device for locomotives, but the effort ought not to be and has not been abandoned. Much is claimed for a smoke consumer recently introduced in Austria, and representatives of the Pennsylvania, the New York Central, and the New York, New Haven and Hartford companies are now actively investigating its merits. The Board is making its own inquiry and arranging for the possible test of another device. With three quarters of the virtue of fuel going up in smoke it is obvious that the discovery of a successful method of saving the loss would be welcome to every railroad management for the economy secured if for no other reason.

3. From time to time for many years the electrification of

railroads has been the theme of active discussion and the subject of sanguine prophecy. In suburban service this improvement may now be confidently predicted, as an event of the near future, the practical tests being made in New York between the two advanced systems of equipment assuring a solution of the question as to the best method of operating railroads with electric power. The new service will be a boon in other ways, but in none so much as in complete relief from the smoke and cinders and dust and gases of coal and coke.

4. Laws or ordinances prohibiting the use of soft coal within the limits of a particular neighborhood are open to the criticism that they may discriminate between communities that suffer from like annoyance, and are objectionable for the reason that they are notoriously difficult of enforcement. While soft coal fires can be readily built upon existing hard coal fires so that outgoing trains can be run in conformity with such requirement, it is extremely difficult if not impracticable to successfully burn hard coal or coke upon existing soft coal fires, so that there is a continued disregard of the requirement in the case of incoming trains. Such a method of abating the nuisance from smoke may become necessary but ought to be recommended only as a last resort after other methods that give good promise of relief have had fair trial and have failed to prove effectual.

5. It is the general opinion of expert employees that the issue of clouds of black smoke from locomotives is ordinarily unnecessary and that the enforcement of rules to secure skilful firing with proper quality of soft coal and with proper care of engines will so reduce the output of smoke as to remove all ground for reasonable complaint. In our judgment this suggestion should be given an immediate and complete test. It means a higher standard of requirement in the school of firing and a skill attainable only by thorough preliminary instruction and subsequent inspection of work done. In this connection it seems proper to state that the Board has selected for appointment as an additional inspector one whose experience as fireman, engineer and master mechanic should qualify him for the special duty of supervising the way in which this recommendation is carried out.

6. In suburban service, as already stated, there is good reason to anticipate an early adoption of electricity as motive power. Meanwhile, here as well as upon switching engines the use of coke and the purchase of additional locomotives fitted to burn a mixture of hard and soft coal, the hard coal so predominating as to reduce

smoke to a minimum, are measures of relief immediately available. The railroad management has already provided for carrying them out. It ought to be said that notwithstanding frequent statements to the contrary soft coal and not hard coal was the fuel in use upon the Boston and Albany railroad before the execution of the lease. Nor has the coal recently used been of cheap quality. The increase in output of smoke has been perfectly apparent, but has been occasioned by the increase in number, load and stopping points of trains, with the careless or imperfect firing due in part to a general indifference about consequences while no direct complaints were being made. It is the purpose of the Board to take up the subject in its next annual report to the Legislature, when the results realized from compliance with the recommendations that have been made can be stated and such further action taken as may be warranted by this experience and by further investigation.

For the Board,

JAMES F. JACKSON,

JULY 31, 1907. [C936]

Chairman.

INSPECTION AND TEST OF LOCOMOTIVE BOILERS.

Circular.

Your attention is called to the statute providing for *the testing of locomotive boilers*, section 173, part II., chapter 463, Acts of 1906, and to the *regulations* of the Board, published under that statute.

All boilers for locomotives, before going into service, must be subjected to an hydraulic pressure of at least twenty-five pounds per square inch in excess of the maximum working pressure allowed, and in no case shall it be less than one hundred and fifty pounds per square inch. The master mechanic or other proper representative of the company shall attend the test in person.

This test must be repeated at least once a year.

Stay-bolts must be examined after every hydraulic test, before engine goes into service, and special examination of stay-bolts must be made at least as often as once in every three months.

When these examinations are made, all the water must be drawn from the boiler, so that the vibration of the sheet may indicate any unsoundness of the stay-bolts, when it is struck with the hammer.

The tell-tale holes must be carefully examined and any found closed must be opened.

After this date all stay-bolts, except flexible bolts and those eight inches or over in length, must be drilled from the outside one and one-fourth inches deep and three sixteenths of an inch in diameter.

In inspecting flexible stay-bolts with caps on the outside, caps must be removed at least once in every twelve months.

All stay-bolts found broken at the time of inspection shall be removed before engine is allowed to go into service.

Steam gauges and safety valves must be tested immediately before hydraulic pressure is applied and tested at least once in three months thereafter.

A record of all tests must be made, giving dates and any other information worthy of mention, and a report of the same for the preceding calendar year must be made annually to the Board of Railroad Commissioners on or before the first day of February.

These regulations supersede all previous regulations made by the Board of Railroad Commissioners.

By order of the Board,

CHARLES E. MANN,

OCTOBER 15, 1907.

Clerk.

SPARK ARRESTERS.

Petition of the Boston and Maine Railroad for approval of installation and maintenance of a spark arrester.

After consideration, — it is

Ordered, That the approval of the Board, under the provisions of chapter 431 of the Acts of 1907, be hereby given to the installation and maintenance on engines of the Boston and Maine railroad of spark arresters of the type submitted with the petition and shown upon plan filed therewith entitled "Boston and Maine R.R., Motive Power Dept., Boston, Feb. 12, 1902, Smoke Box Arrangement."

Attest:

CHARLES E. MANN,

NOVEMBER 1, 1907.

[6684]

Clerk.

Petition of the Boston, Revere Beach and Lynn Railroad Company for approval of installation and maintenance of a spark arrester.

After consideration, — it is

Ordered, That the approval of the board, under the provisions of chapter 431 of the Acts of 1907, be hereby given to the installation and maintenance on engines of the Boston, Revere Beach and Lynn railroad of spark arresters of the type submitted with the petition and shown upon plan filed therewith entitled "B., R. B. & L. R.R., Apr. 25, '99, Smoke Box Arrangement."

Attest: CHARLES E. MANN,
NOVEMBER 1, 1907. [6678] Clerk.

Petition of the Central Vermont Railway Company for approval of installation and maintenance of a spark arrester.

After consideration, — it is

Ordered, That the approval of the Board, under the provisions of chapter 431 of the Acts of 1907, be hereby given to the installation and maintenance on engines of the Central Vermont railway of spark arresters of the type submitted with the petition and shown upon plan filed therewith entitled "Central Vermont Ry., Motive Power Dept., St. Albans, Vt., July 25, 1907, Standard Smoke Box Arrangement."

Attest: CHARLES E. MANN,
NOVEMBER 1, 1907. [6674] Clerk.

Petition of the New York Central and Hudson River Railroad Company, lessee of the Boston and Albany railroad, for approval of installation and maintenance of a spark arrester.

After consideration, — it is

Ordered, That the approval of the Board, under the provisions of chapter 431 of the Acts of 1907, be hereby given to the installation and maintenance on engines of the Boston and Albany railroad of spark arresters of the type submitted with the petition and shown upon plan filed therewith entitled "New York Central Lines: Smoke Box: Interior Arrangement: Locomotive," and dated October 16, 1906.

Attest: CHARLES E. MANN,
NOVEMBER 1, 1907. [6643] Clerk.

Petition of the New York, New Haven and Hartford Railroad Company for approval of installation and maintenance of a spark arrester.

After consideration, — it is

Ordered, That the approval of the Board, under the provisions of chapter 431 of the Acts of 1907, be hereby given to the installation and maintenance on engines of the New York, New Haven and Hartford railroad of spark arresters of the type submitted with the petition and shown upon plan filed therewith entitled "N. Y., N. H. & H. R.R., Mechanical Dept., New Haven, May 3, '05, Front End Arrangement."

Attest: CHARLES E. MANN,
NOVEMBER 1, 1907. [6682] Clerk.

LOCOMOTIVE WHISTLING.

Petition of the selectmen of Framingham concerning whistling upon the Boston and Albany railroad.

After public notice and hearing and further consideration, it appearing that the crossing hereinafter named is otherwise protected and that no unusual conditions require the continuance of whistling at this place as a crossing signal, — it is

Ordered, That the whistling of locomotives upon the Boston and Albany railroad as a crossing signal at Bishop street in the town of Framingham be prohibited; it being understood, however, that the whistle shall be sounded whenever upon approaching this crossing there seems to be special occasion therefor to avoid accident.

Attest: CHARLES E. MANN,
JULY 8, 1907. [6619] Clerk.

Petition of citizens of Reading concerning whistling upon the Boston and Maine railroad.

After notice and hearing and further consideration, it appearing that the crossings hereinafter named are otherwise protected and that no unusual conditions require the continuance of whistling at these places as a crossing signal, — it is

Ordered, That the whistling of locomotives upon the Boston and Maine railroad as a crossing signal at Main, Ash, Woburn and

Washington streets in Reading be prohibited; it being understood, however, that the whistle shall be sounded whenever upon approaching these crossings there seems to be special occasion therefor to avoid accident.

In respect to whistling within the limits of the town of Reading for the purpose of giving signals, it is recommended that the company restrict the whistling for such purpose to that which is absolutely necessary for safe and proper operation.

Attest:
NOVEMBER 22, 1907. [6773]

CHARLES E. MANN,
Clerk.

Petition of W. B. Clarke and others for abatement of whistling on steam railroads within the town of Weston.

In September, 1901, the Board issued an order that upon the Fitchburg Division of the Boston and Maine railroad, between Church street and Conant Road in the town of Weston, whistling as a crossing signal should be prohibited, which left the crossings known as Sibley road and Weston street protected by one whistle signal for both crossings by east and west bound trains. After a hearing and a view of these crossings, the Board recommends that no change be made in the existing rules.

On the Central Massachusetts branch, it is ordered that on outward trains the whistling for Woburn street and on inward trains for Church street be abolished, it being understood, however, that the whistle shall be sounded whenever upon approaching these crossings there seems to be special occasion therefor to avoid accident.

At the crossing known as Concord road the Board is unwilling to order a discontinuance of whistling.

In respect to the whistling on the Fitchburg and Central Massachusetts divisions of the Boston and Maine railroad in Weston it is recommended that all unnecessary whistling be abolished.

For the Board,

DECEMBER 2, 1907. [6703]

CHARLES E. MANN,
Clerk.

CERTIFICATES PRELIMINARY TO OPERATION — STREET RAILWAYS.

During the year, the Board, having made examinations of a part or the whole of the railways of various street railway companies, issued its certificates that all laws relating to construction had been complied with, and that they appeared to be in a safe condition for operation. A detailed list of these certificates follows: —

Berkshire Street Railway Company.

Williamstown, August 13, 1907 — Single track extending in Cole avenue from a connection with the present track of the company, over the new highway bridge over the Boston and Maine railroad and in North Hoosac road to a connection with the track of the company, a distance of about eleven hundred thirty feet; also a “Y” track in Cole avenue and in North Hoosac road to a connection with the Sand Springs line of the company, a distance of about two hundred fifty feet. [6666]

Boston and Northern Street Railway Company.

Beverly, April 4, 1907 — About five hundred ninety-seven feet single track, at the junction of Cabot and Rantoul streets and extending from Cabot street, across Water street to private land. [6488]

Beverly, November 5, 1907 — Relocated and reconstructed main track four hundred twenty-seven feet in length, and turnout two hundred twenty-three feet long, on Elliott street near Mackay street; relocated and reconstructed track on Rantoul street between Cabot street, north end, and Cabot street, south end, special work at Cabot street, south end, Federal street, Pond street, Elliott street, Cabot street, north end; and three turnouts, the length of track measured as single track being seven thousand five hundred eighty-five feet. [6661]

Chelsea, Everett, May 13, 1907 — Double tracks, extending from the junction of Washington avenue and Woodlawn avenue in Chelsea, through Woodlawn avenue to the Everett line; and through Woodlawn avenue in Everett to Elm street, total length

of track, measured as single track, being two thousand six hundred ninety-two feet. [6544]

Chelsea, November 5, 1907 — Double tracks in Garfield, Washington and Woodlawn avenues, three thousand eight hundred fifty feet in length, measured as single track; also about one thousand three hundred fifty-two feet relocated and reconstructed track on Washington avenue near the car house. [6661]

Haverhill, November 26, 1907 — Single track in Main street in the Bradford district; double and single track and cross-overs in Main, Merrimack, Water and Bridge streets; double track and cross-over in Main street and single curve track extending into Arlington street; and turnout in River street. [6661]

Ipswich, July 20, 1907 — One thousand three hundred feet single track extending in High street, crossing the recently constructed bridge over the Boston and Maine railroad. [6647]

Lawrence, November 26, 1907 — Siding extending across Merrimack street and on private land to power house; double track turnout in Merrimack street near the power house; double tracks in Newbury street near Essex street; cross-over in Essex street between Broadway and Franklin street; double tracks in Merrimack street between Union street and the car barn; and single and double tracks in South Union street and curved double tracks extending into Merrimack street. [6661]

Lowell, November 26, 1907 — Single track in First street between Simpson and Llewellyn streets, about 1807 feet in length. [6661]

Lynn, November 5, 1907 — Turnout on Euclid avenue near Flax Pond, two hundred ninety-seven feet long, and relocated and reconstructed track at Summer street and Western avenue eight hundred eighteen feet long; double tracks on Washington street from the Nahant-Lynn line to near the power station of the company, the length of said track, measured as single track, being about two thousand one hundred seventy feet; curves at junction of Western avenue and Washington street, one hundred eighty-two feet measured as single track; relocated and reconstructed track on Broadway at Wyoma car house, about five hundred sixty-six feet long; and relocated and reconstructed track at the junction of Essex street and Eastern avenue, about eighty-five feet long. [6661]

Malden, November 5, 1907 — Relocated and reconstructed double track on Main street between the Malden-Melrose line and Malden square, about eight thousand four hundred thirty feet in length, measured as single track. [6661]

Salem, November 5, 1907 — Branch-off on Webster street, one

hundred thirteen feet long, and branch-off on Webb street eighty-three feet long. [6661]

Wakefield, November 5, 1907 — Relocated and reconstructed double track on Main street near the Melrose line, about four hundred seventy-five feet in length, measured as single track. [6661]

Boston and Worcester Street Railway Company.

Framingham, September 14, 1907 — Three hundred fifty feet of track on the bridge on Eastern avenue over the Sudbury river in Framingham Centre. [6696]

Citizens Electric Street Railway Company.

Newburyport, October 16, 1907 — Turnout on Storey avenue. [6743]

Hartford and Worcester Street Railway Company.

Sturbridge, July 3, 1907 — From a connection with the present track of the company in Main street in the village of Fiskdale, through Main street, Holland road and over private land to a connection with the Springfield and Eastern street railway at the Sturbridge-Brimfield line, the length of said track being 1.38 miles, 0.94 miles being upon private land. [6625]

Holyoke Street Railway Company.

Holyoke, July 15, 1907 — About one thousand nine hundred feet double track in High, Sargeant and Maple streets. [6636]

Holyoke, August 28, 1907 — Double tracks in Sargeant street from its intersection with Maple street to a point near Elm street, a distance of about six hundred sixty feet. [6636]

Interstate Consolidated Street Railway Company.

Attleborough, January 21, 1907 — Single track in Park street, three hundred ninety-one feet long. [6417]

Attleborough, June 10, 1907 — In Park street from a connection with the present tracks, in South Main, Mill and Union streets, and in County and North Main streets, the total length of said track being about three thousand seven hundred feet. [6574]

Attleborough, July 30, 1907 — Single track, extending in County street from Dennis street to Thatcher street, a distance of 2178 feet. [6614]

Attleborough, July 31, 1907 — Single track, 165 feet long, connecting present track upon North Main street with the Attleborough Branch railroad. [6667]

North Attleborough, June 5, 1907 — Siding in Washington street, three hundred feet long. [6572]

North Attleborough, June 5, 1907 — Spur track in Washington and Park streets, three hundred twenty-five feet in length. [6573]

Lowell and Fitchburg Street Railway Company.

Chelmsford, Westford, March 12, 1907 — Single track, in Chelmsford from the main line on Groton road, through the West Chelmsford road to the Westford town line, and in Westford in Nabnassett street and Brookside road to the Brookside station; length of track being about ten thousand nine hundred sixty-eight feet. [6357]

Westford, May 29, 1907 — Single track, fifteen thousand two hundred seventy-six feet in length, extending from the south side of the crossing of the Stony Brook branch of the Boston and Maine railroad at Brookside station, in Westford, Lowell, Providence, Cummings and Depot roads to Westford Centre. [6570]

Nahant and Lynn Street Railway Company.

Lynn, Nahant, May 14, 1907 — Double and single tracks, extending from a connection with the tracks of the Boston and Northern street railway in Washington street in Lynn, in the metropolitan parkway to the Nahant line, and in Nahant, over the metropolitan parkway, metropolitan park lands along Nahant beach, across Castle road, in the Great Marsh road, Flash road, Castle road, Range road and over private land to a point near the Relay House; also in Nahant from the junction of Flash and Spring roads, in Spring road, Emerald street and Willow road to a point near Wharf street, total length being 3.62 miles. [5905]

Natick and Cochituate Street Railway Company.

Natick, December 31, 1907 — Single track and turnout in North Main street, extending from Worcester street southerly a distance of three thousand feet. [6831]

New Bedford and Onset Street Railway Company.

Mattapoisett, June 10, 1907 — Turnout on Hammond's Hill, five hundred and thirty-seven feet in length. [6579]

Middleborough, January 26, 1907 — Siding in South Middleborough, three hundred feet long. [6339]

Newton Street Railway Company.

Newton, December 31, 1907 — Single track and turnout in Centre street, between Crescent avenue and Paul street, on the bridge over the Boston and Albany railroad and approaches thereto, and single curve extending from said track to private land, total length of said track being one thousand one hundred fifty feet. [6830]

Norton and Taunton Street Railway Company.

Attleborough, October 16, 1907 — Single track in Pleasant and Park streets, a distance of 1162 feet, and side track connection on Pleasant street 122 feet long. [6630]

Mansfield, April 8, 1907 — Relocated single track in Chauncey street, two hundred fifty feet in length. [6531]

Old Colony Street Railway Company.

Braintree, November 7, 1907 — Single track, turnouts and branch-offs in Washington and Hancock streets and Independence avenue between the Quincy boundary line and the Holbrook town line, the length of track being twenty-four thousand four hundred thirty-four feet. [6662]

Brockton, November 5, 1907 — Curved track at Montello street and Perkins avenue, seventy-seven feet long; side turnout on Copeland street, three hundred ninety-five feet long; diamond turnout on Pleasant street, two hundred seventy-five feet long, and two hundred seventy-five feet relocated track on said street; and side turnout on Crescent street, three hundred twenty-five feet long. [6662]

Dedham, November 5, 1907 — Curve at Boyden square, connecting tracks on Milton and Bussey streets, one hundred one feet long; and branch-off on Washington street near Court street, one hundred forty-one feet long. [6662]

Fall River, July 30, 1907 — Double tracks extending from North Main street, in Old Colony avenue, in Durfee and Turner streets, a distance of 700 feet. [6632]

Fall River, September 14, 1907 — Sections of track, consisting of 2100 feet on Bay and Columbia streets, 122 feet on Stanley street, 58 feet on Hanover street, 229 feet on South Main street between Rodman and Morgan streets, and 98 feet on North Main street near Wilson street. [6662]

Hingham, November 5, 1907 — Single track on Rockland street, under bridge carrying tracks of the New York, New Haven and Hartford railroad, seven hundred twenty feet long. [6662]

Holbrook, November 5, 1907 — Single track and turnouts in Franklin street from the Braintree town line to the Brockton town line, about twenty thousand five hundred fifty-seven feet in length. [6662]

Quincy, July 24, 1907 — Double tracks in Hancock street from a point a little north of Atlantic bridge, over said bridge and in Hancock street to a point near the junction of Sagamore street, a single track on Sagamore street connecting with the easterly track on Hancock street and a crossover on Hancock street, the total length of said track being about one thousand one hundred seventy-five feet. [6064]

Stoughton, November 5, 1907 — Diamond turnout three hundred ninety-one feet long and relocated track three hundred ninety-one feet in length on Park street; side turnout on Park street near Birch street, four hundred fifteen feet long; and single track on Park street between Walnut avenue and Summer street. [6662]

Taunton, September 14, 1907 — Three thousand one hundred ninety-one feet of track on West Water and Third streets and Somerset avenue, and one thousand one hundred eighty-four feet in Winthrop street near Howard street at the car house. [6662]

Weymouth, November 5, 1907 — Relocated track, three hundred forty-seven feet long, on Pleasant street near Sampson's turnout. [6662]

Providence and Fall River Street Railway Company.

Swansea, November 16, 1907 — Two turnouts in the state highway, one opposite the land of John Young and the other near Mason's corner. [6788]

Springfield Street Railway Company.

Springfield, August 30, 1907 — Single track extending from a connection with the track of the company in Court street to a connection with the northbound track in Main street, and single track from the present track in Court street to a connection with the southbound track in Main street, the total length of said tracks being 300 feet. [6693]

Springfield, December 23, 1907 — Turnout in King street, three hundred feet long. [6827]

Springfield, December 23, 1907 — Turnout in Worthington street near Sackett avenue, two hundred fifty feet long; curved track from State street into St. James avenue, two hundred fifty feet long. [6828]

Springfield and Eastern Street Railway Company.

Monson, June 19, 1907 — About two thousand seven hundred feet single track, extending southerly in Main street from a connection with the present track of the company in Monson Center, over the south branch of the Quabaug river and in South Main street to Wales road. [6576]

Palmer, Monson, Brimfield, July 3, 1907 — In Palmer from a connection with the present track in the road from Palmer to Monson, upon private land and over the Quabaug river to Monson; in Monson, over private land, in a highway and in the state road to Brimfield; in Brimfield upon private land, in the state road and other highways to Brimfield Center, and in the highway and partly over private land through East Brimfield village to a connection with the Hartford and Worcester street railway at the Brimfield-Sturbridge line, the total length of track being 11.74 miles, 8.33 miles being upon private land. [6617]

Taunton and Pawtucket Street Railway Company.

Attleborough, July 30, 1907 — Curve from present terminus in Emory street to a siding upon Pleasant street, a distance of 106 feet; a curve from the present terminus on Emory street to the new line of the Norton and Taunton street railway on Pleasant street, a distance of 76 feet; and a curve from the Norton and Taunton street railway on Pleasant street to a connection with the Interstate Consolidated street railway on Park street, a distance of 108 feet. [6663]

Uxbridge and Blackstone Street Railway Company.

Northbridge, September 7, 1907 — Single track, sixty feet long, in the highway north of Plummers Corner, connecting the present track of the company with the track of the Worcester and Blackstone Valley street railway. [6707]

Union Street Railway Company.

Fairhaven, June 26, 1907 — Siding in Washington street, three hundred seventy-five feet in length. [6600]

Fairhaven, July 10, 1907 — One thousand four hundred ninety-eight feet single track in Main street. [6623]

New Bedford, June 26, 1907 — Single track, curves and branch-offs in Ash, Arnold and Elm streets, the length of said track being three thousand four hundred feet. [6600]

New Bedford, July 10, 1907 — One thousand nine hundred sixty feet single track in Ashland street, between Robson street and Clark street. [6622]

New Bedford, September 9, 1907 — Turnout on Kempton street between Newton and Park streets, three hundred fifteen feet long. [6714]

West End Street Railway Company.

Boston (Dorchester), October 7, 1907 — Double tracks in Dudley street in the Dorchester district, extending from near Magnolia street to near Nonquit street, the length of said track measured as single track, being one thousand fifty-six feet. [6710]

Boston (East Boston), October 11, 1907 — Double tracks on Saratoga street on and near the bridge over the Boston and Albany railroad, the length of said track being two hundred seventy-three feet. [6711]

Boston (East Boston), October 21, 1907 — Double tracks extending from the entrance to the tunnel in Maverick square, through Maverick and Orleans streets to Sumner street, single curve connecting track on Meridian street with track on Maverick street, and cross-over on Maverick street, total length of track being one thousand seven hundred sixty-two feet, measured as single track. [6709]

Boston (East Boston), December 4, 1907 — Double curved tracks at the junction of Saratoga and Bennington streets, connecting tracks of the company on Saratoga street with the tracks of the Boston and Revere Electric street railway in Bennington street, the length of said track being two hundred ninety-one feet measured as single track. [6823]

Malden, October 7, 1907 — Double tracks and cross connections, in Eastern avenue and Lynn street from a connection with the tracks of the company in Broadway to the Linden station of the Boston and Maine railroad, the length of said track being 8951 feet measured as single track. [6737]

Worcester and Blackstone Valley Street Railway Company.

Northbridge, August 13, 1907 — Single track extending in the highway near Plummer's Corner, a distance of sixty feet. [6681]

SPEED OF CARS.

Petition of the Boston and Maine Railroad for removal of certain restrictions limiting speed of trains passing over railroad grade crossing at Wilmington Junction.

After consideration, paragraph 89 of the Rules and Regulations of the company, governing the movement of trains and engines at Wilmington Junction, is approved as changed, so that it will read as follows: "When signals are in safety position trains and engines may proceed without interruption."

Attest: CHARLES E. MANN,
JANUARY 9, 1907. [6411] Clerk.

Petition of the City of Pittsfield for approval of regulation as to operation of cars of the Pittsfield Electric Street Railway Company.

After consideration, — it is

Ordered, That the approval of the Board be given to the regulation adopted by the board of aldermen of Pittsfield under date of November 18, 1907, providing "That, under the provisions of section 74, part III, chapter 463 of the Acts of the General Court for 1906, all cars passing the corner of North and Tyler streets on the tracks of the Pittsfield Electric Street Railway Company shall come to a full stop upon approaching said corner. The word 'car' in the foregoing shall be construed to include 'snow plows'."

Attest: CHARLES E. MANN,
DECEMBER 3, 1907. [6806] Clerk.

Petition of selectmen of Southbridge for approval of regulations for speed and operation of cars upon street railways in that town.

After notice and hearing and full consideration, — it is

Ordered, That the regulations relative to speed and operation of cars upon street railways in the town of Southbridge, established

by the selectmen of said town, as revised and approved, be as follows:

1. The rate of speed at which any electric car shall be run within the business and residential section of the town shall not exceed twenty (20) miles an hour. The residential and business section in question shall include that portion of the highways lying between the junction of Worcester and Mechanics streets on the east, and the junction of West Main and Pleasant streets on the west.

2. Proper warning of the approach of cars shall be given at the junction of all streets, at cross-walks and curves.

3. The use of whistles for giving warning of the approach of cars is prohibited within the limits described in the first paragraph of these regulations.

4. No head-light, or other light of more than one hundred twenty-five candle power shall be used on any car unless the same is properly screened, or reduced to approximately that power while the car is being operated within the limits described in the first paragraph of these regulations.

5. Unless authority is specially given, no single truck car shall be operated at a rate of speed exceeding fifteen (15) miles an hour.

6. Before taking any heavy descending grade, the speed of every car must be so reduced as to test the working of the brake.

7. Wherever the railway occupies a portion of, or is close to, the travelled road, the speed of every car must be from time to time so reduced as to permit the safe use of the road by others.

8. Every car shall come to a full stop before crossing another street railway at grade.

9. In approaching any public or private way crossed by the railway the speed of every car must be so reduced that the car may be stopped in season to avoid collision with any person or vehicle rightfully using such way.

10. In rounding curves and in all cases where the view of the motorman is obstructed, the speed of every car must be reduced to meet this condition of limited vision of railway and highway.

11. A car must always be under such control as to enable the motorman to stop it in season to avoid collision or injury in every emergency which it is reasonable to expect may arise.

Attest:

CHARLES E. MANN,

OCTOBER 7, 1907.

[6719]

Clerk.

STATIONS AND STATION ACCOMMODATIONS.

SUPPLEMENTARY REPORT TO THE GENERAL COURT.

Forest Hills Station.

To the Honorable the Senate and the House of Representatives in General Court Assembled:

The Board of Railroad Commissioners in supplement of its annual report respectfully represents that in locating a station upon the Boston Elevated railway at Forest Hills it finds that some doubt exists as to whether the company without an enabling act can carry out the plan which the Board believes will best serve the public interests and which has been approved by the Mayor of Boston.

In order to promptly secure the benefits of the elevated service for this community the Board would respectfully suggest the consideration of such legislation as will make it possible to construct this station without delay.

For the Board,

JAMES F. JACKSON,
Chairman.

APRIL 17, 1907. [6547]

Petition of the Boston Elevated Railway Company for approval of station at Forest Hills.

The Board has reached the following conclusions with reference to station accommodation upon the Forest Hills extension of the elevated railway.

1. The second plan presented by the company for a station at Forest Hills, like the first, is objectionable for the reason that it unduly interferes with the other uses of the public square. Although it is proposed that the area directly taken from the square be made good by the purchase of adjacent real estate, the circling of the surface cars through the square would at times constitute a serious encroachment upon its use for other travel.

2. Wherever a permanent terminal for this extension of the elevated railway may be located, a station will be needed at Forest

Hills, and one ought to be provided at once in order that the advantages of the elevated service may be speedily realized.

3. In view of the uncertainties which surround railway enterprises now in process of development but not as yet clearly defined, the Board believes that the determination of the site for a permanent terminal for this branch of the elevated railway ought to be delayed until the conditions which are to exist are better known.

4. To meet immediate demands for station accommodation at Forest Hills square and to furnish temporary terminal accommodation until the permanent terminal is located, the Board suggests a structure in accordance with the plan which has recently been called to the attention of the company.

If in using this station any part of the public square is enclosed, such enclosure should be limited to a definite period, covering only such time as will be required to properly provide for the permanent terminal either at this point or at some one of the other places advocated by parties interested. If this station be finally adopted as the terminal, in adapting it to such purposes any enclosure of the public area should be made good at the expense of the company.

The method suggested for dealing with the situation will secure an early enjoyment of the new facilities for travel without prejudice to the final selection of the place and character of a terminal station.

Any legislation needed to carry out the plan can be brought to the attention of the present legislature.

For the Board,

JAMES F. JACKSON,

APRIL 9, 1907. [6219]

Chairman.

Petition of the Boston Elevated Railway Company for approval of plans showing proposed location of elevated railway at and near Forest Hills square in Boston.

The annexed plans, numbered 26862 to 26868 inclusive, showing proposed form and method of construction and location of the tracks, elevated structure and station of the Boston Elevated railway in Washington street and Forest Hills square in the city of Boston, from a point near Burnett street to a point at or near where Washington street is crossed by the Boston and Providence railroad (New York, New Haven and Hartford Railroad Company, lessee), said plans being in part a modification of plans

numbered 26180 and 26181, approved by the Board June 21, 1905, and of plans numbered 26189 and 26190, approved by the Board September 10, 1907, are hereby approved, consent being given to the changes shown.

The Board reserves the right whenever it adjudges this station to be a permanent structure to direct such changes as it may deem expedient in that part of the plans which provides for an enclosure of a portion of the public square, unless the company restores to this square in such manner as the Board shall approve an area equal to that so enclosed.

JAMES F. JACKSON,
GEORGE W. BISHOP,
CLINTON WHITE,

NOVEMBER 27, 1907. [6750]

Commissioners.

Petition of E. P. Barry and others for construction of station on elevated structure of Boston Elevated railway at Broadway, Boston.

After notice and hearing, a view and careful consideration, the Board does not find sufficient reason to warrant the recommendation at this time that a station be established at this point.

The petition is therefore dismissed without prejudice.

For the Board,

CHARLES E. MANN,

DECEMBER 10, 1907. [6405]

Clerk.

Complaint of Richard S. Teeling, respecting conditions at the City square and the Thompson square stations of the Boston Elevated railway.

In our opinion there is good reason for the claim that at City square and at Thompson square some provision should be made for sheltering passengers who transfer from the elevated to the surface cars at these points.

Though radical changes are to be made at both of these stations within little more than a year, it is only reasonable that meanwhile some temporary covering should be constructed as a part of the existing structure to intercept the rain, snow and drippings and so protect patrons who are waiting below for the arrival of surface

cars. An overhead covering to temporarily serve this purpose would not involve any enclosure of the public street and would in no way interfere with its use.

We recommend such a shelter at each of these stations.

For the Board,

JAMES F. JACKSON,

FEBRUARY 19, 1907. [6475]

Chairman.

Petition of the Boston Elevated Railway Company for approval of plans showing proposed changes at stations of its elevated structure in the city of Boston.

The annexed plans numbered 28500, 28252, 27721, 27791, 27824, 27629 and 27630, and 27653, showing proposed changes in elevated structure, platforms and stations, and approaches thereto, of the Boston Elevated Railway Company at Northampton street, Beach street, South station, State street, Battery street, City square and Thompson square in the city of Boston, the same being modifications of plans numbered 25024, 25029, 25030, 25031, 25032, 25033, 25034 and 25038, approved by the Board July 11, 1898; of plans numbered 20112, 20151, 20192, 20163, 20190, 20189, 20170, 20204 and 20205, approved by the Board July 26, 1898; of plan numbered 25038, approved by the Board January 20, 1899; of plan numbered 20224, approved by the Board July 17, 1900; of plans numbered 20126, 20465, 20466, 20227, 20228, approved by the Board July 18, 1900; of plans numbered 20469 and 20470, approved by the Board November 9, 1900; of plan numbered 20232, approved by the Board May 31, 1901; of plans numbered 26655, 26656, 26676, 26678, 26681, 26683, 26684, 26668 and 26669, approved by the Board July 27, 1904; of plan numbered 11807, approved by the Board September 20, 1904; of plan numbered 27778, approved by the Board April 10, 1905; of plan numbered 11813, approved by the Board December 11, 1905; of plan numbered 27628, approved by the Board April 9, 1907; and of plan numbered 27652, approved by the Board April 9, 1907, are hereby approved and consent given to the changes shown.

JAMES F. JACKSON,

GEORGE W. BISHOP,

CLINTON WHITE,

OCTOBER 1, 1907. [6687]

Commissioners.

Petition of the Boston Elevated Railway Company for approval of plan showing proposed temporary shelter at City square.

The annexed plan, numbered 27628, showing proposed location, form and method of construction of a temporary shelter over a portion of the surface platform of the City square station of the Boston Elevated railway, the same being a modification or change of plan numbered 25038, approved by the Board July 11, 1898; of plans numbered 20204 and 20205, approved by the Board July 26, 1898; of plan numbered 25038, approved by the Board January 20, 1899; of plan numbered 20227, approved by the Board July 18, 1900; and of plan numbered 26668, approved by the Board July 27, 1904, is hereby approved and consent given to the changes shown.

JAMES F. JACKSON,
GEORGE W. BISHOP,
CLINTON WHITE,

APRIL 9, 1907. [6533]

Commissioners.

Petition of the Boston Elevated Railway Company for approval of plan showing shelter at Thompson square.

The annexed plan, numbered 27652, showing proposed location, form and method of construction of a shelter over a portion of the surface platform of the Thompson Square station of the Boston Elevated railway, the same being a modification or change of plans numbered 25038 and 25039, approved by the Board July 11, 1898; of plan numbered 25038, approved by the Board January 20, 1899; of plan numbered 20224, approved by the Board July 17, 1900; of plan numbered 20228, approved by the Board July 18, 1900; of plan numbered 20232, approved by the Board May 31, 1901; and of plan numbered 26669, approved by the Board July 27, 1904, is hereby approved and consent given to the changes shown.

JAMES F. JACKSON,
GEORGE W. BISHOP,
CLINTON WHITE,

APRIL 9, 1907. [6534]

Commissioners.

Petition of the Boston Elevated Railway Company for approval of plans showing proposed changes in its Dudley Street station.

The annexed plans, numbered 27579 and 27580, showing location, form and method of construction of proposed changes in the Dudley Street station of the Boston Elevated Railway Company, said plans being modifications or changes of plan numbered 25021, approved by the Board July 11, 1898; of plans numbered 20007 and 20008, approved by the Board July 26, 1898; of plans numbered 20013, 20014 and 25022, approved by the Board January 20, 1899; of plan numbered 25451, approved by the Board April 18, 1899; of plan numbered 20023, approved by the Board July 18, 1900; of plans numbered 27550 and 27555, approved by the Board November 9, 1900, and of plan numbered 26653, approved by the Board July 27, 1904, are hereby approved and consent given to the changes shown.

JAMES F. JACKSON,
GEORGE W. BISHOP,
CLINTON WHITE,

MARCH 6, 1907. [6266]

Commissioners.

Petition of the Boston Elevated Railway Company for approval of plan of elevated storage yard and connection, at Sullivan Square station, Charlestown.

The annexed plan, numbered 26193, showing proposed location, form and method of construction of storage yard and connection of the Boston Elevated railway on private property bounded by Main street, Beacham street, Arlington avenue and Dorrance street in that part of Boston known as Charlestown, the same being a modification or change of plans numbered 25482 and 25484, approved by the Board July 7, 1899 and of plan numbered 26673, approved by the Board July 27, 1904, is hereby approved and consent given to the changes shown.

JAMES F. JACKSON,
GEORGE W. BISHOP,
CLINTON WHITE,

JANUARY 21, 1907. [6391]

Commissioners.

Petition of the board of aldermen of Holyoke relative to improvement and changes of the grounds and yards of the New York, New Haven and Hartford Railroad Company in that city.

There is imperative need of substantial improvement in the condition of the station grounds in Holyoke on the Holyoke and Westfield railroad, operated under lease by the New York, New Haven and Hartford Railroad Company.

The fact that a difference of opinion exists between the lessor and the operating company as to which ought to bear the expense of these improvements is no reason for the continued inconvenience of patrons.

We recommend to both companies that prompt action be taken to bring about the necessary betterment. Some way of deciding any legal question between the parties can surely be provided without further sacrifice of the public interests. The terms of the contract may not be clear in all respects, but they show that the lessee has taken over the property and the business. It would naturally be expected therefore that the lessee should take the initiative in providing needed accommodation for patrons.

For the Board,

JAMES F. JACKSON,
Chairman.

JUNE 3, 1907. [6551]

Petition of the Boston, Revere Beach and Lynn Railroad Company for approval of relocation of the Point of Pines station in Revere.

It appearing, after notice and hearing, that the selectmen of Revere have approved the proposed relocation of passenger station and that the public interests will be promoted by such change, — it is

Ordered, That the approval of the Board be hereby given to the relocation of the Point of Pines station of the Boston, Revere Beach and Lynn railroad in the town of Revere, by the removal of the same a distance of about one hundred feet to the north and east of the present location of said station, as shown upon a plan on file with the petition.

Attest: CHARLES E. MANN,
MARCH 27, 1907. [6497] *Clerk.*

SUNDAY TRAINS AND BOATS.

Petition of the Clyde Steamship Company for authority to run steamships on the Lord's day.

After careful consideration of the public interests, — it is

Ordered, That authority be hereby given to the Clyde Steamship Company to run its steamships within the waters of the commonwealth on the Lord's day during the year ending March 1, 1908, as set forth in its petition, with the understanding that the company shall perform in connection therewith as a consequence of the authority herein granted only such work as may prove to be necessarily incident to the running of steamships as aforesaid; subject, however, to the following conditions:

1. Within the jurisdiction covered by this order, no intoxicating liquors shall be sold or furnished and no disorderly conduct, gaming or other sport be permitted either upon said ships or upon any premises owned or controlled by the company.

2. The authority hereby given may be revoked at any time in the discretion of the Board, without previous notice to said company.

Attest: CHARLES E. MANN,

MARCH 1, 1907. [6495]

Clerk.

Petition of the Cunard Steamship Company for authority to run steamships on the Lord's day.

After careful consideration of the public interests, — it is

Ordered, That authority be hereby given to the Cunard Steamship Company to run its steamships within the waters of the commonwealth on the Lord's day during the year ending December 31, 1907, and in connection therewith to receive and deliver baggage and to load and unload freight whenever such work is necessary to meet an emergency incident to the running of the steamships as herein authorized, upon the condition that the authority hereby given may be revoked at any time in the discretion of the Board without previous notice to said company.

Attest: CHARLES E. MANN,

JANUARY 10, 1907. [6433]

Clerk.

*Petition of the Dominion Atlantic Railway Steamship Company
for authority to run steamboats on the Lord's day.*

After careful consideration of the public interests, — it is

Ordered, That authority be hereby given to the Dominion Atlantic Railway Steamship Company to run its steamboats within the waters of the commonwealth on the Lord's day during the year ending December 31, 1907, in accordance with the schedule described in its petition, and in connection therewith to receive and deliver baggage and to load and unload freight whenever such work is necessary to meet an emergency incident to the running of the boats as herein authorized, upon the following conditions:

1. Rates for transportation shall not be less than regular week-day fares and rates.

2. No intoxicating liquors shall be sold or furnished on said boats or on any premises owned or controlled by the company at which said boats land or touch; and no gaming or unlawful sport shall be permitted thereon.

3. No person under the influence of liquor, or noisy or guilty of improper language or behavior, shall be allowed on said boats or premises.

4. The authority hereby given may be revoked at any time, in the discretion of the Board, without previous notice to said company, and will be revoked upon proof of any conduct upon the part of the company inconsistent with this order.

Attest: CHARLES E. MANN,
JANUARY 3, 1907. [6414] Clerk.

Similar orders were issued on petitions of the Eastern Steamship Company, the Maine Coast Transportation Company, the Merchants and Miners Transportation Company, the Metropolitan Steamship Company and the Ocean Steamship Company.

*Petition of the Boston and Maine Railroad for authority to operate
Sunday trains.*

After consideration, — it is

Ordered, That the Boston and Maine Railroad be hereby authorized to run on the Lord's day during the year ending December 31,

1907, the trains specified in the petition and accompanying schedules, subject to the following conditions:

1. No train shall be run as an excursion train.
2. The rates of fare on the passenger trains shall in no case be less than those charged on regular week-day trains between the same stations.

All previous orders authorizing the running of trains on the Lord's day on the Boston and Maine railroad are hereby revoked, such revocation to take effect at the same time that the above named schedule is put in force.

Attest: CHARLES E. MANN,
JANUARY 5, 1907. [6420] Clerk.

By similar orders, schedules of regular Sunday trains, deemed to be necessary for the public accommodation, have been authorized by the Board on the New York, New Haven and Hartford railroad, the Boston and Albany railroad, the Hoosac Tunnel and Wilmington railroad and the Boston, Revere Beach and Lynn railroad.

Petition of the Boston and Albany Railroad (New York Central and Hudson River Railroad Company, lessee) for authority to run emergency trains on the Lord's day.

After consideration, — it is

Ordered, That the Boston and Albany Railroad (New York Central and Hudson River Railroad Company, lessee) be hereby authorized to run special trains on the Lord's day during the period ending December 31, 1907, for the exclusive purpose of distributing newspapers whenever emergencies arise that prevent the use for that purpose of trains upon the regular schedule.

Attest: CHARLES E. MANN,
JUNE 8, 1907. [6424] Clerk.

Petition of Fraternal Lodge, No. 132, I. O. O. F., for permission for a Sunday train from Wellfleet to Chatham and return.

After consideration, — it is

Ordered, That the New York, New Haven and Hartford Railroad Company be hereby authorized to run a special train from Wellfleet to Chatham and return on Sunday, June 9, 1907, for the exclusive

use of the members of Fraternal Lodge, of Exchange Lodge and the Rebekah lodges, I. O. O. F., for the purpose of attending memorial services at Chatham; provided that said train shall not be run as a public excursion train, and that the rates of fare shall not be less than those charged on regular week-day trains.

Attest: CHARLES E. MANN,
MAY 29, 1907. [6429] Clerk.

Petition of San Antonio Society for permission for a Sunday train from New Bedford to Taunton and return.

After consideration, — it is

Ordered, That the New York, New Haven and Hartford Railroad Company be hereby authorized to run a special train from New Bedford to Taunton and return on Sunday, June 16, 1907, for the exclusive use of said society, for the purpose of attending exercises of religious worship; provided that said train shall not be run as a public excursion train, and that the rates of fare shall not be less than those charged on regular week-day trains.

Attest: CHARLES E. MANN,
JUNE 5, 1907. [6429] Clerk.

Petition of the 1st and 2nd Swedish M. E. Churches of Worcester for permission for Sunday trains from Worcester to Sterling Junction and return.

After consideration, — it is

Ordered, That the Boston and Maine Railroad be hereby authorized to run special trains from Worcester to Sterling Junction and return on Sunday, August 4, 1907, and on Sunday, August 11, 1907, for the exclusive use of persons who desire to attend services at Sterling Junction Camp Grounds; *provided* that said trains shall not be run as public excursion trains, and that the rates of fare shall not be less than those charged on regular week-day trains.

Attest: CHARLES E. MANN,
JUNE 4, 1907. [6420] Clerk.

Petition of the A. M. E. Church of New Bedford for permission for a Sunday train from New Bedford to Boston and return.

After consideration, — it is

Ordered, That the New York, New Haven and Hartford Railroad Company be hereby authorized to run a special train from New Bedford to Boston and return on Sunday, July 7, 1907, for the exclusive use of the members of the A. M. E. Church of New Bedford who desire to attend exercises of religious worship at Boston; *provided* that said train shall not be run as a public excursion train, and that the rates of fare shall not be less than those charged on regular week-day trains.

Attest: CHARLES E. MANN,

MAY 21, 1907.

[6429]

Clerk.

A number of other special Sunday trains have been authorized by the Board in the course of the year, for what were deemed to be good and exceptional reasons.

THE FALL RIVER-SOMERSET BRIDGE.

The Railroad Commissioners, the Harbor and Land Commissioners and the County Commissioners of the county of Bristol were constituted a Joint Board by chapter 462 of the Acts of 1903, and directed to locate and construct a new drawbridge over Taunton Great river, between the city of Fall River and the town of Somerset, with the necessary approaches and ways thereto, at a cost not to exceed \$1,000,000.

On December 17, 1906, proposals for the construction of this bridge and its approaches, in response to advertised notice, were received by the Joint Board, and contract awarded to the Holbrook, Cabot & Rollins Corporation of Boston, Mass., the contract price being \$770,000 for the entire bridge and approaches, the contractor to complete all work and have the bridge open and ready for public travel on or before August 30, 1908. The costs and expenses of constructing this bridge and of acquiring and constructing the necessary approaches and ways are borne by the county of Bristol in the first instance.

The plans and specifications are for a bridge and approaches, practically at right angles to the river, covering about 2,363 lineal feet of construction, including changes in present street grades made necessary by new approaches. The bridge will have a driveway of 44 feet in the clear between curbs, with footway or sidewalks eight feet wide, with roadway completed in surface by a brick and wood pavement laid without grade in line of traffic, sidewalks in wood surface throughout. Approaches will be finished by macadam pavement in maximum grade rate of three per cent. with granite curb and gutters defining roadway. Sidewalks over approaches will be in granolithic finish, and the embankment slopes of approach will be completed by a protecting grass sodding. A protecting hand rail will be placed throughout adjoining sidewalks on both sides of the bridge and approaches. The portion of roadway construction directly over the river will be supported by trusses of steel resting upon masonry piers, the balance of roadway in shape of bridge approaches, about 1,673 feet in length, will be in earth.

The bridge over river, some 922.5 feet in length between faces of masonry, will have a superstructure of rectangular design riveted throughout, supporting roadway on its upper members 40 feet above mean low water, and will be made up of five fixed spans, three of 200 feet, two of 100 feet, with clearance of 17 feet at mean low water, and a draw span over channel of roller lift design in two leaves rolling in opposite directions, giving clear channel way of 100 feet between fenders, and a clearance when closed of 34 feet at mean low water, with draw so controlled in operation as to occupy not more than one minute in complete opening.

The superstructure will be supported by a substructure of two abutments and five piers of substantial masonry, with piers supporting roller lift 80 feet by 22 feet in dimension at foundation level and 80 feet in height, carried in pneumatic caissons through 50 feet of water to solid rock bed some 64 feet below mean low water; balance of substructure cared for in foundation by piling driven through sand and gravel to rock bottom, or upon piling driven to refusal in the compact material of the river bottom, the foundation depths varying from 15 feet to 40 feet below mean low water.

A timber fender some 400 feet in length adjoining channel piers gives protection to water craft using channel. Bridge and fenders will be lighted throughout by electricity.

Up to December 1, 1907, about 66 per cent. of the projected construction has been completed; this means the completion of all masonry substructure, 80 per cent. of the approach grading, with the erection of superstructure under way, and 50 per cent. of total material required in superstructure delivered in yard near bridge site.

The chief engineer for the Joint Board, Richard M. Berrian, under whose immediate direction all work has been done, died December 23, 1907, and the Joint Board selected Edmund K. Turner as chief engineer to complete the work, with R. F. Stoddard as resident engineer.

In December, 1906, and October, 1907, takings were made of land and flats at the Fall River and Somerset ends of the bridge, under authority of chapter 462 of the Acts of 1903.

THE CAPE COD CANAL.

Under the provisions of chapter 448 of the Acts of 1889, incorporating the Boston, Cape Cod and New York Canal Company, the Board of Railroad Commissioners and the Board of Harbor and Land Commissioners were constituted a Joint Board for the purposes defined in said act. The act of 1889 was amended by chapter 476 of the Acts of 1900.

On December 11, 1906, this company formally presented to the Joint Board certain petitions relating to:—

The approval of the issue of \$6,000,000 capital stock and issue of bonds; crossing of the railroad of the Old Colony Railroad Company; approval of form of advertisement for bids.

On January 15, 1907, a public hearing was held, and the canal company, the New York, New Haven and Hartford Railroad Company, the Old Colony Railroad Company, town and county officials, property owners and others, were heard on the above petitions.

On January 31, 1907, the Joint Board signed the following order:—

COMMONWEALTH OF MASSACHUSETTS.

IN BOARD OF RAILROAD COMMISSIONERS AND HARBOR AND LAND COMMISSIONERS, SITTING AS A JOINT BOARD, JANUARY 31, 1907.

Petition of the Boston, Cape Cod and New York Canal Company for authority to issue capital stock.

After a public hearing and further investigation, and to enable the petitioning company to properly take advantage of the provisions of chapter 476, Acts of 1900, it is

Ordered, That the approval of this Board be given to an issue by the Boston, Cape Cod and New York Canal Company of 100 shares of capital stock, at the par value of \$100 each, as an issue of stock reasonably necessary and of the amount required for the purpose of paying in part the necessary cost of making surveys and plans for the location and construction of the proposed canal, such shares to be issued only after payment in cash of the full amount of the issue herein authorized, and the proceeds of such shares to be applied only to the purpose above named. It is further

Ordered, That the paragraph in the order of this Board published under date of June 26, 1899, authorizing an issue of stock to the

amount of \$140,000 and bonds to a like amount be hereby revoked, and that the terms and conditions upon which issues of stock and bonds were generally authorized in that order be hereby modified in so far as they conflict with the issue of the stock herein authorized upon the terms herein prescribed, but otherwise be and remain in full force and effect.

JAMES F. JACKSON,
GEORGE W. BISHOP,
CLINTON WHITE,
Railroad Commissioners.

GEO. E. SMITH,
HENRY J. SKEFFINGTON,
SAMUEL M. MANSFIELD,
Harbor and Land Commissioners.

On February 6, 1907, the Joint Board considered informally the form of advertisement entitled "Invitation to Contractors," which called for proposals for the construction of this canal to be received at the office of the canal company in Boston until March 28, 1907, at 12 o'clock noon. Subsequently the form of contractor's proposal, contract for construction, specifications and bond for construction relating to this canal were likewise informally considered by the Joint Board, and, having been favorably passed upon, were forwarded to counsel for the canal company.

On April 3, 1907, a copy of the proposal of the Cape Cod Construction Company, the only one received by the canal company, and the contract signed by said construction company under date of March 27, 1907, together with the bond for the construction of said canal bearing the same date, were presented to the Joint Board.

On May 8, 1907, the Board of Harbor and Land Commissioners, having previously heard parties in interest, passed the following vote: —

On motion, *Voted*, That the Board approve the plan of the location and the plan for the construction of the Boston, Cape Cod and New York Canal, filed September 28, 1899, and amended in accordance with the modifications required by the Board, under the authority of section 4 of chapter 448, Acts of 1899, and identify such plans and the approval thereof by the signatures of the Board upon the eight sheets now on file in this office.

On May 10, 1907, a copy of the vote of May 8, 1907, was presented to the Joint Board, also petitions of the canal company asking for a determination as to the point or points where the

railroad of the Old Colony Railroad Company shall cross the Boston, Cape Cod and New York canal by a drawbridge or bridges, or by a tunnel or tunnels constructed under said canal; for the approval of the contract between the canal company and the Cape Cod Construction Company; and for authority to issue stock and bonds.

On May 21 and 28, 1907, public hearings were held, and all parties were fully heard.

On May 31, 1907, the Joint Board heard statements of counsel and of the engineer for the canal company, counsel for the railroad companies, and others, in relation to the proposed location, with reference to the present railroad bridge, of a bridge to be built across the proposed canal near the Buzzards Bay station.

On June 1, 1907, members of the Joint Board made an inspection of the route of the proposed canal.

On June 3, 1907, the following orders were issued by the Joint Board:—

Whereas, The plans of the location and construction of the Boston, Cape Cod and New York canal, filed with the Board of Harbor and Land Commissioners September 28, 1899, and amended in accordance with the modifications required by said Board under the authority of section 4 of chapter 448, Acts of 1899, were approved by said Board on May 8, 1907; and

Whereas, Said canal company, on May 10, 1907, presented to the Joint Board two petitions, as follows:—

To the Honorable the Railroad Commissioners and the Harbor and Land Commissioners in Joint Board.

The petition of the Boston, Cape Cod and New York Canal Company, incorporated under the laws of this Commonwealth, sheweth:—

1. That in pursuance of the act of the General Court incorporating your petitioner, which was passed on the 1st of June, 1899 (1899, c. 448), your petitioner within four months after the passage of the said act deposited with the Treasurer of the Commonwealth the sum of \$200,000 as security for the damages therein mentioned, and afterwards within the same time filed with the Harbor and Land Commissioners a plan of the proposed location and a plan of the proposed construction of the canal in the said act mentioned.

2. That the Board of Harbor and Land Commissioners thereupon gave such notice as they deemed sufficient of a time and place appointed by them for a public hearing upon the said plans, and in accordance with such notice heard all parties interested who appeared before them, and afterwards on the 8th of May, 1907, approved the said plans with certain modifications which they deemed the public interest to require.

Your petitioner prays that the Joint Board may determine at what point

or points the railroad of the Old Colony Railroad Company shall cross the said canal by a drawbridge or bridges or by a tunnel or tunnels constructed under the said canal.

FOR THE BOSTON, CAPE COD AND NEW YORK CANAL COMPANY,

S. E. YOUNG,

Second Vice-President.

To the Honorable the Railroad Commissioners and the Harbor and Land Commissioners in Joint Board.

The petition of the Boston, Cape Cod and New York Canal Company, incorporated under the laws of this Commonwealth, sheweth: —

1. That the Harbor and Land Commissioners, on the 8th of May, 1907, in accordance with the act of the General Court incorporating your petitioner, which was passed on the 1st of June, 1899 (1899, c. 448), approved certain plans of the proposed location and construction of the canal mentioned in the said act.

2. That the Cape Cod Construction Company, incorporated under the laws of Maine, has entered into a contract with your petitioner, subject to the approval of this Board, for the construction and equipment of the said canal in accordance with the said plans, by the terms of which capital stock and bonds of this corporation are to be issued in payment for the labor to be performed and materials to be furnished in the construction and equipment of the said canal. And the said contract was so entered into after and in pursuance of an advertisement by your petitioner for bids thereunder in the manner set out in the affidavit of Robert K. Tomlin, dated the 8th of April, 1907, and filed with this Board; and the said Cape Cod Construction Company made the lowest bid received by your petitioner in pursuance of the said advertisement, and has given certain bonds satisfactory to the petitioner for the performance of the said contract.

Your petitioner prays that the said advertisement may be deemed satisfactory to and that the said contract may be approved by this Board in accordance with the act of the General Court relative to your petitioner, passed on the 17th of July, 1900 (1900, c. 476), and that your petitioner may be authorized to issue its capital stock and bonds from time to time pro rata to the labor performed and the materials furnished on the certification of this Board that such work has been done or such materials furnished and in accordance with the terms of such contract.

FOR THE BOSTON, CAPE COD AND NEW YORK CANAL COMPANY,

S. E. YOUNG,

Second Vice-President.

And whereas, The Joint Board heard, on May 21, 1907, after public notice, all parties desiring to be heard on said petitions presented May 10, 1907, and subsequently, on May 24 and 28, 1907, heard statements of counsel and others in relation to the crossings of the proposed canal; and

Whereas, It appears that public advertisement for bids, entitled "Information to Contractors," in form suggested by the Joint Board, has been made, as set forth in the affidavit of Robert K. Tomlin, filed with

the Joint Board, and that the Cape Cod Construction Company made the lowest bid received by said canal company in pursuance of said advertisement, and that said construction company has given bonds to the satisfaction of said canal company; and

Whereas, Said canal company has executed a contract with said construction company, as appears by letter from counsel for said canal company to the Joint Board, calling for the construction and equipment of its canal in accordance with the plans approved by the Board of Harbor and Land Commissioners and with all the requirements of chapter 476 of the Acts of 1900, by the terms of which contract capital stock and bonds of the said canal company are to be issued in payment for the labor to be performed and materials to be furnished for the said purpose;

It is unanimously *Voted*, That the following orders be and the same are hereby adopted, and that they be signed by the members of the Joint Board, and a certified copy of each order, attested by the clerk of the Joint Board, be sent to counsel for said canal company.

COMMONWEALTH OF MASSACHUSETTS.

IN BOARD OF RAILROAD COMMISSIONERS AND HARBOR AND LAND COMMISSIONERS, SITTING AS A JOINT BOARD, JUNE 3, 1907.

Petition of the Boston, Cape Cod and New York Canal Company, presented on the tenth day of May, 1907, to this Joint Board, asking it to determine at what point or points the railroad of the Old Colony Railroad Company shall cross the canal of the said canal company under the provisions of chapter 448 of the Acts of 1899.

After public advertisement and due notice to all parties interested, and a public hearing in pursuance therewith, it appearing that the Board of Harbor and Land Commissioners, on the eighth day of May, 1907, approved certain plans for the location and construction of the said canal in accordance with the above-named statute, it is

Ordered, That the said railroad cross the said canal by a drawbridge in the town of Bourne near the Buzzards Bay station, at the points indicated by a red line crossing the location of the proposed canal shown on the plan filed with this order, and entitled "Plan showing proposed change in location Old Colony Railroad near Buzzards Bay July, 1906."

JAMES F. JACKSON,
GEORGE W. BISHOP,
CLINTON WHITE,
Railroad Commissioners.

GEO. E. SMITH,
HENRY J. SKEFFINGTON,
SAMUEL M. MANSFIELD,
Harbor and Land Commissioners.

COMMONWEALTH OF MASSACHUSETTS.

IN BOARD OF RAILROAD COMMISSIONERS AND HARBOR AND LAND COMMISSIONERS, SITTING AS A JOINT BOARD, JUNE 3, 1907.

Petition of the Boston, Cape Cod and New York Canal Company for approval of the advertisement hereinafter named, and for the approval of a certain contract between the Cape Cod Construction Company and the said canal company (a copy of which is filed with this order), calling for the construction and equipment of its canal in accordance with the plans approved by the Board of Harbor and Land Commissioners, and with all the requirements of chapter 448 of the Acts of 1899, as amended by chapter 476 of the Acts of 1900, by the terms of which contract capital stock and bonds of the said canal company are to be issued in payment for the labor to be performed and materials to be furnished for the said purpose.

After public notice and hearing in pursuance of the same, it appearing that the said contract has been executed after advertisement for bids in the manner set forth in the affidavit of Robert K. Tomlin, filed with this Board, and that the said Cape Cod Construction Company made the lowest bid received in pursuance of the said advertisement, and that said construction company has given bonds to the satisfaction of the said canal company, it is

Ordered, That the said advertisement be declared satisfactory, and that said contract be and the same is hereby approved by this Board.

JAMES F. JACKSON,
GEORGE W. BISHOP,
CLINTON WHITE,
Railroad Commissioners.

GEO. E. SMITH,
HENRY J. SKEFFINGTON,
SAMUEL M. MANSFIELD,
Harbor and Land Commissioners.

Notice was received from the chief engineer of the Cape Cod Construction Company in August, 1907, that construction was commenced on August 19, 1907.¹

¹ For orders of the Board of Railroad Commissioners relative to time for and manner of relocating the Old Colony railroad for crossing the canal, see pp. 232, 233.

MISCELLANEOUS.

EXTENSION OF CORPORATE POWERS.

Petition of the Plymouth, Carver and Wareham Street Railway Company, under section 30, part III., chapter 463, Acts of 1906, for extension of its corporate powers.

After notice and hearing and further consideration, — it is

Ordered, That the Board hereby extend the time within which the Plymouth, Carver and Wareham Street Railway Company is authorized to construct and operate its railway to November 30, 1908, said company in the judgment of the Board having exercised due diligence in the premises, and public necessity and convenience requiring such extension.

Attest: CHARLES E. MANN,
MAY 21, 1907. [6556] Clerk.

Petition of the Worcester and Northern Street Railway Company, under section 30, part III., chapter 463, Acts of 1906, for extension of its corporate powers.

After notice and hearing and further consideration, — it is

Ordered, That the Board hereby extend the time within which the Worcester and Northern Street Railway Company is authorized to construct and operate its railway to January 1, 1909, said company in the judgment of the Board having exercised due diligence in the premises, and public necessity and convenience requiring such extension.

Attest: CHARLES E. MANN,
JULY 30, 1907. [6646] Clerk.

Petition of the Worcester and Providence Street Railway Company, under section 30, part III., chapter 463, Acts of 1906, for extension of its corporate powers.

After notice and hearing and further consideration, — it is

Ordered, That the Board hereby extend the time within which the Worcester and Providence Street Railway Company is authorized

to construct and operate its railway to June 8, 1909, said company in the judgment of the Board having exercised due diligence in the premises, and public necessity and convenience requiring such extension.

Attest: CHARLES E. MANN,
NOVEMBER 20, 1907. [6797] Clerk.

EMERGENCY TOOLS.

Petition of the New York, New Haven and Hartford Railroad Company for approval of plan for equipping baggage cars with emergency tools.

After consideration, — it is

Ordered, That the approval of the Board be hereby given to the manner of equipping baggage cars of the Pennsylvania Railroad Company, operated in Massachusetts, with emergency tools, as shown upon a plan dated February 11, 1907, on file with the petition.

Attest: CHARLES E. MANN,
MARCH 4, 1907. [6498] Clerk.

LIGHTING CARS.

Circular Letter.

To companies operating steam railroads within this state:

The opening of the season when failure to properly light passenger cars in the suburban service is extremely provoking to patrons leads us to call again to the attention of railroad companies our recommendation that cars be so lighted by whatever method is in use that passengers who desire to read may have the opportunity.

For the Board,

JAMES F. JACKSON,
OCTOBER 17, 1907. [C1044] Chairman.

STREET RAILWAYS EARNING FIVE PER CENT DIVIDENDS.

Communication.

*To the Honorable The Bank Commissioner of the Commonwealth,
State House, Boston, Massachusetts:*

DEAR SIR, — Pursuant to the provisions of section 148, part 3, chapter 463, Acts of 1906, we transmit the following list of street railway companies incorporated in this Commonwealth which appear from the returns made by them to have annually earned and properly paid, without impairment of assets or capital stock, dividends of not less than five per cent (5%) upon their capital stock for the past five years:

Athol and Orange Street Railway Company
Boston Elevated Railway Company
Citizens Electric Street Railway Company
Dartmouth and Westport Street Railway Company
East Middlesex Street Railway Company
Fitchburg and Leominster Street Railway Company
Holyoke Street Railway Company
Pittsfield Electric Street Railway Company
Springfield Street Railway Company
Union Street Railway Company
West End Street Railway Company

Very truly yours,

JAMES F. JACKSON,

JANUARY 15, 1907. [6438]

Chairman.

RAILROAD RELIEF ASSOCIATION — BY-LAWS.

*Petition of the Boston, Revere Beach and Lynn Railroad Relief
Association for approval of amendment to by-laws.*

After due notice and hearing and full consideration, — it is

Ordered, That the approval of the Board be hereby given to the amendment to the by-laws of the Boston, Revere Beach and Lynn Railroad Relief Association made at the annual meeting, a copy of which amendment is on file in this office.

Attest:

CHARLES E. MANN,

FEBRUARY 8, 1907.

[6453]

Clerk.

APPOINTMENT OF RAILROAD INSPECTORS.

It is *Ordered*, That John Q. Hennigan, of East Milton, be hereby appointed a railroad inspector under the provisions of section 1, part I., chapter 463, Acts of 1906, for the term of three years, beginning with the first day of October, 1907.

Attest: CHARLES E. MANN,
SEPTEMBER 30, 1907. [6736] *Clerk.*

It is *Ordered*, That Winfield L. Larry, of Taunton, be hereby appointed a railroad inspector under the provisions of section 1, part I., chapter 463, of the Acts of 1906, for the term of three years, beginning with the first day of September, 1907.

Attest: ALLAN BROOKS,
JULY 31, 1907. [6691] *Assistant Clerk.*

It is *Ordered*, That John H. Parant, of Somerville, be hereby appointed a railroad inspector under the provisions of section 1, part I., chapter 463, Acts of 1906, for the term of three years, beginning with the first day of January, 1908.

Attest: CHARLES E. MANN,
NOVEMBER 27, 1907. [6813] *Clerk.*

It is *Ordered*, That Henry W. Seward, of Watertown, be hereby appointed a railroad inspector under the provisions of section 1, part I., chapter 463, Acts of 1906, for the term of three years, beginning with the first day of December, 1907.

Attest: CHARLES E. MANN,
NOVEMBER 27, 1907. [6812] *Clerk.*

EXPENSES OF OFFICE.

Advertising,	\$42 50
Carpenter work,	104 70
Cleaning carpets,	43 80
Electric lighting, etc.,	129 45
Expert services,	5,864 70
Expressage,	28 08
Furniture,	46 76
Janitor and care of office,	1,310 00
Newspapers, publications, etc.,	247 60
Postage,	924 75
Printing annual report,	4,738 46
Printing and binding,	286 60
Railroad inspectors' expenses,	1,143 84
Rent of office,	4,700 00
Stationery and office supplies,	1,021 41
Stenographers and extra clerical services,	3,476 31
Sundries,	167 53
Telephone and telegrams,	398 41
Travelling expenses,	544 30
<hr/>	
Total office expenses, ¹	\$25,219 20

¹ Exclusive of salaries fixed by statute.

TABULATED STATEMENTS

COMPILED FROM THE

Returns of Railroad Corporations

FOR THE

YEAR ENDING JUNE 30, 1907.

DESCRIPTION OF RAILROADS OWNED AND OPERATED.

RAILROADS AND BRANCHES. (LEASED ROADS IN ROMAN.) (BRANCHES IN ITALICS.)	1. — TERMINI.		2. — LENGTH OF LINE.		3. — SECOND TRACK.		4. — SIDE TRACK.		5. — Total Length computed as Single Track.
	From	To	Total.	In Massa- chusetts.	Total.	In Massa- chusetts.	Total.	In Massa- chusetts.	
ATTLEBOROUGH BRANCH, ¹ BERKSHIRE. (See <i>New York,</i> <i>New Haven & Hartford</i> .) BOSTON & ALBANY (operated by the <i>New York Central &</i> <i>Hudson River, Lessee</i>),	Attleborough, . .	No. Attleborough, .	3,720	3,720	—	—	1,420	1,420	5,140
<i>Athol,</i>	—	—	—	—	—	—	—	—	—
<i>Springfield,</i>	Boston, . .	Albany, N. Y., .	199,910	161,350	240,150 ²	195,620 ²	233,730	201,430	673,790
<i>Cottage Farm,</i>	Springfield, . .	Athol, . .	45,260	45,260	—	—	11,800	11,800	57,060
<i>Hudson, N. Y.,</i>	Cottage Farm, . .	East Boston, . .	9,450	9,450	5,180	5,180	26,230	26,230	40,860
<i>So. Framingham,</i>	Chatham, N. Y., .	Hudson, N. Y., .	17,330	—	1,000	—	6,760	—	25,090
<i>Millbury Jct.,</i>	So. Framingham, .	Millford, . .	12,000	12,000	—	—	6,650	6,650	18,650
<i>Beacon St., Boston,</i>	Millbury Jct., . .	Millbury Village, .	3,280	3,280	—	—	1,090	1,090	4,370
<i>Riverside Jct.,</i>	Beacon St., Boston, .	Riverside Jct., . .	9,890	9,890	9,890	9,890	7,240	7,240	27,020
<i>Saxonville,</i>	Riverside Jct., . .	Newton L. Falls, .	1,090	1,090	—	—	910	910	2,000
<i>Spencer,</i>	Natick, . .	Saxonville, . .	3,700	3,700	—	—	2,420	2,420	6,120
<i>North Brookfield,</i>	Spencer, . .	South Spencer, . .	2,180	2,180	—	—	1,180	1,180	3,360
<i>Pittsfield & North Adams,</i>	Chester, . .	Chester Quarries, . .	5,270	5,270	—	—	2,190	2,190	7,460
<i>Ware River,</i>	East Brookfield, . .	North Brookfield, . .	4,000	4,000	—	—	1,320	1,320	5,320
<i>Boston & Lowell.</i> (See <i>Bos-</i> <i>ton & Maine</i> .)	Pittsfield, . .	North Adams, . .	18,550	18,550	—	—	9,110	9,110	27,660
	Webster Jct., . .	Webster, . .	11,230	11,230	—	—	3,230	3,230	14,460
	Palmer, . .	Winchendon, . .	49,350	49,350	—	—	7,750	7,750	57,100
	—	—	—	—	—	—	—	—	—
	Boston, . .	Portland, Me., .	115,310	36,560	82,740 ³	38,090 ³	118,400	75,840	316,450
	Boston, . .	Portland, Me., .	108,290	41,450	58,110 ⁴	42,180 ⁴	92,260	61,240	258,660
	Conway Jct., Me., .	Intervale Jct., N.H., .	73,370	—	—	—	19,940	—	93,310
	Rochester, N. H., .	Portland, Me., .	53,860	—	—	—	23,810	—	77,670
	No. Cambridge Jct., .	Northampton, . .	95,690	95,690	—	—	25,470	25,470	121,160
	East Somerville, . .	Charlestown, . .	1,090	1,090	1,090	1,090	—	—	2,180
	Revere Jct., . .	Saugus River Jct., .	3,340	3,340	2,490	2,490	—	190	6,020

¹ Operated by electricity.

² Including 23,430 miles of third track and 16,810 miles of fourth track.

³ Including 1,530 miles of third track.

⁴ Including .730 mile of third track.

<i>Middlesex Central,</i>	Lexington,	Concord,	11.080	11.080	-	3.840	14.920
<i>Mystic,</i>	Somerville,	Mystic Wharves,	2.250	2.250	.850	34.820	37.920
<i>Salem & Lowell,</i>	Peabody,	Tewksbury Jct.,	16.800	16.800	-	7.950	24.750
<i>Stoneham,</i>	Montvale Jct.,	Stoneham,	2.500	2.500	-	1.590	4.090
<i>Woburn,</i>	Winchester,	No. Woburn Jct.,	6.200	6.200	6.200	3.620	16.020
<i>Concord & Montreal,</i>	Nashua, N. H.,	Groveton, N. H.,	181.070	-	36.620 ³	115.530	333.220
<i>Concord & Manchester,¹</i>	Concord, N. H.,	Manchester and Pennacook, N. H.,	27.880	-	-	2.290	30.170
<i>Franklin & Tilton,</i>	Franklin, N. H.,	Tilton, N. H.,	4.950	-	-	3.370	8.320
<i>Hooksett,</i>	Hooksett, N. H.,	Bow Jct., N. H.,	7.590	-	-	3.530	11.120
<i>Lake Shore,</i>	Lakeport, N. H.,	Alton Bay, N. H.,	17.280	-	-	1.900	19.180
<i>Manchester & No. Weare,</i>	Manchester, N. H.,	Henniker, N. H.,	24.500	-	-	8.540	33.040
<i>Mount Washington,</i>	Wing Road, N. H.,	Mt. Wash'ton, N. H.,	20.170	-	-	5.300	25.560
<i>New Boston,</i>	Parker's, N. H.,	New Boston, N. H.,	5.190	-	-	.810	6.000
<i>Profile & Franconia,</i>	Bethlehem J., N. H.,	Profile House, N. H.,	12.840	-	-	1.780	14.620
<i>Suncook Valley,</i>	Bethlehem, N. H.,	Bethlehem, N. H.,	17.410	-	-	3.750	21.160
<i>Suncook Valley Extension,</i>	Suncook, N. H.,	Pittsfield, N. H.,	4.460	-	-	1.240	5.700
<i>Tilton & Belmont,</i>	Pittsfield, N. H.,	Ctr. Barnst'd, N. H.,	4.170	-	-	650	4.820
<i>Whitefield & Jefferson,</i>	Belmont, N. H.,	Belmont, N. H.,	34.060	-	-	13.280	47.340
<i>Concord & Portsmouth,</i>	Whitefield, J., N. H.,	Berlin, N. H.,	39.870	-	-	15.800	55.670
<i>Connecticut River,</i>	Jeff. Mead's, N. H.,	Jefferson, N. H.,	74.000	50.080	36.800 ⁴	64.470	175.270
<i>Chicopee Falls,</i>	Portsmouth, N. H.,	Manchester, N. H.,	2.350	2.350	-	2.000	4.350
<i>Connection with Fitchburg Div.,</i>	Chicopee Jct.,	Chicopee Falls,	-	-	-	.190	1.230
<i>Easthampton,</i>	East Deerfield,	East Deerfield,	1.040	1.040	-	1.470	4.970
<i>Conn. & Pass. Rivers,</i>	Mt. Tom Jct.,	Easthampton,	3.500	3.500	-	43.700	154.000
<i>Delaware & Hudson,*</i>	White Riv. Jct., Vt.,	Canada Line,	110.300	-	6.940	-	6.940
	Mechanicville, N. Y.,	Crescent, N. Y.,	-	-	55.350 ⁵	88.040	133.040
	Boston,	Fitchburg,	49.650	49.650	70.600	97.950	273.800
	Greenfield,	Rotterdam J., N. Y.,	105.250	44.010	-	10.750	51.050
	State Line, Vt.,	Troy, N. Y.,	40.300	-	-	26.670	79.320
	Ashburnham Jct.,	Bellevue Falls, Vt.,	53.850	10.760	-	.520	3.110
<i>Ashburnham,</i>	So. Ashburnham,	Ashburnham,	2.590	2.590	-	4.440	28.080
<i>Greenville,</i>	Ayer,	Greenville, N. H.,	23.640	14.060	-	-	-

¹ Including .800 mile of third track.
² Total length, .370 mile double track, of which .120 mile of one track is owned by the Lowell & Andover.
³ Including 1.350 miles of third track.

⁴ Including .800 mile of third track.
⁵ Including 3.680 miles of third track and 2.020 miles of fourth track.
^{*} Trackage rights.

Description of Railroads Owned and Operated — Continued.

RAILROADS AND BRANCHES. (LEASED ROADS IN ROMAN.) (BRANCHES IN ITALICS.)	1. — TERMINI.		2. — LENGTH OF LINE.		3. — SECOND TRACK.		4. — SIDE TRACK.		5. — Total Length computed as Single Track.
	From	To	Total.	In Massa- chusetts.	Total.	In Massa- chusetts.	Total.	In Massa- chusetts.	
BOSTON & MAINE — Con.									
Fitchburg — Con.									
<i>Ice,</i>	Charlestown, .	Charlestown, .	.660	.660	.490	.490	—	—	1.150
<i>Marlborough,</i>	South Acton, .	Marlborough, .	12.350	12.350	—	—	4.080	4.080	16.430
<i>Milford,</i>	Squamacook Jct., .	Milford, N. H., .	21.730	9.560	—	—	4.220	2.170	25.950
<i>Peterborough,</i>	Winchendon, .	Peterboro', N. H., .	15.930	2.250	—	—	2.260	—	18.190
<i>Saratoga,</i>	Saratoga, N. Y., .	Schuylerville, N. Y., .	25.820	—	—	—	4.570	—	30.390
<i>Watertown,</i>	West Cambridge, .	Schuylerville, N. Y., .	6.630	—	—	—	—	—	18.090
<i>Worcester,</i>	Worcester, .	Waltham, .	35.740	35.740	6.480	6.480	4.980	4.980	50.850
<i>Grand Trunk,*</i>	Lenoxville, P. Q., .	Winchendon, .	2.950	—	—	—	15.110	15.110	2.950
<i>Horn Pond Branch,</i>	Woburn Branch, .	Sherbrook, P. Q., .	.663	.663	—	—	—	.076	.739
<i>Kennebunk & Kennebunkp't,</i>	Kennebunk, Me., .	Horn Pond, .	4.500	—	—	—	.920	—	5.420
<i>Lowell & Andover,</i>	Lowell, .	Lowell Jct., .	8.850	8.850	7.280	7.280	6.160	6.160	22.290
<i>Manchester & Keene,</i>	Greenfield, N. H., .	Keene, N. H., .	29.890	—	—	—	2.510	—	32.100
<i>Manchester & Lawrence,</i>	State Line, N. H., .	Manchester, N. H., .	22.390	—	—	—	11.160	—	33.550
<i>Manchester & Milford,</i>	Grasmere Jct., N. H., .	East Milford, N. H., .	18.540	—	—	—	1.160	—	19.700
<i>Massachusetts Valley,</i>	Canada Line, .	Lenoxville, P. Q., .	31.950	—	—	—	7.450	—	39.400
<i>Stanstead,</i>	Stanstead Jct., P. Q., .	Stanstead, P. Q., .	3.510	—	—	—	.960	—	4.470
<i>Nashua, Acton & Boston,</i>	North Acton, .	Nashua, N. H., .	20.120	15.140	—	—	4.570	2.180	24.680
<i>Nashua & Lowell,</i>	Lowell, .	Nashua, N. H., .	14.500	9.250	14.500	9.250	13.060	8.210	42.060
<i>N. Y., N. H. & Hartford,*</i>	North Acton, .	Concord, N. H., .	4.210	4.210	—	—	—	—	4.210
<i>Northern,</i>	Concord, N. H., .	White River J., Vt., .	69.500	—	—	—	24.390	—	93.890
<i>Bristol,</i>	Franklin, N. H., .	Bristol, N. H., .	13.410	—	—	—	1.090	—	14.500
<i>Concord & Claremont,</i>	Concord, N. H., .	Claremont J., N. H., .	70.900	—	—	—	13.260	—	84.160
<i>Peterboro' & Hillsboro',</i>	Concord, N. H., .	Hillsboro' B'ge, N. H., .	18.510	—	—	—	2.060	—	20.570
<i>Penigewasset Valley,</i>	Peterboro', N. H., .	Hillsboro' B'ge, N. H., .	22.930	—	—	—	13.400	—	36.330
<i>Peterborough,</i>	Plymouth, N. H., .	Lincoln, N. H., .	10.500	—	—	—	1.630	—	12.130
<i>Portland Union Ry. Station,</i>	Wilton, N. H., .	Greenfield, N. H., .	.560	—	.560	.560	—	—	1.120
<i>Stony Brook,</i>	Portland, Me., .	Portland, Me., .	13.160	13.160	—	—	6.120	6.120	19.280

Troy & Bennington, . . .	Hoosac Jct., N. Y.,	State Line, Vt.,	5,040	—	—	1,240	—	6,280
Troy Union,* . . .	Troy, N. Y.,	Troy, N. Y.,	2,130	—	—	—	—	4,260
Vermont & Massachusetts, . .	Fitchburg, . .	Greenfield, . .	55,780	55,780	55,780	55,380	55,380	166,940
<i>Turner's Falls</i> , . . .	Turner's Falls Jct.,	Turner's Falls,	2,800	2,800	—	.590	.590	3,390
Wilton, . . .	Nashua, N. H.,	Wilton, N. H.,	15,500	—	—	5,030	—	20,530
Worc., Nashua & Rochester,	Worcester, . .	Rochester, N. H.,	94,480	39,460	18,130	63,980	44,420	176,590
BOSTON & PROVIDENCE. (See	—	—	—	—	—	—	—	—
<i>N. Y., N. H. & Hartford.</i>)	—	—	—	—	—	—	—	—
BOSTON, REVERE BEACH &	—	—	—	—	—	—	—	—
LYNN,† . . .	East Boston,	Lynn, .	8,800	8,800	8,800	3,100	3,100	20,700
CAPE ANN GRANITE,† . . .	Orient Heights,	Winthrop, .	4,400	4,400	4,400	1,000	1,000	9,800
CHATHAM. (See <i>New York,</i>	Lanesville, . .	Pigeon Cove, .	1,436	1,436	—	.781	.781	2,217
<i>New Haven & Hartford.</i>)	—	—	—	—	—	—	—	—
CHESTER & BECKET. (See	—	—	—	—	—	—	—	—
<i>Boston & Albany—N. Y.</i>	—	—	—	—	—	—	—	—
<i>Central & H. R. Lessee.</i>)	—	—	—	—	—	—	—	—
CONNECTICUT RIVER. (See	—	—	—	—	—	—	—	—
<i>Boston & Maine.</i>)	—	—	—	—	—	—	—	—
FITCHBURG. (See <i>Boston &</i>	—	—	—	—	—	—	—	—
<i>Maine.</i>)	—	—	—	—	—	—	—	—
GRAFTON & UPTON, . . .	North Grafton,	Milford, .	16,500	16,500	—	3,790	3,790	20,290
<i>Electric Loop.</i> (See	Brooks St., Upton, .	West Upton, .	2,620	2,620	—	—	—	2,620
HOLYOKE & WESTFIELD. (See	—	—	—	—	—	—	—	—
<i>N. Y., N. H. & Hartford.</i>)	—	—	—	—	—	—	—	—
HOOSAC TUNNEL & WILMING-	Hoosac Tunnel,	Wilmington, Vt., .	24,250	8,220	—	3,000	1,000	27,250
TON, . . .	—	—	.750	—	—	—	—	.750
<i>Hartwellville & Mountain</i>	—	—	—	—	—	—	—	—
<i>Mills.</i> (See	—	—	—	—	—	—	—	—
HORN POND BRANCH. (See	—	—	—	—	—	—	—	—
<i>Boston & Maine.</i>)	—	—	—	—	—	—	—	—
LOWELL & ANDOVER. (See	—	—	—	—	—	—	—	—
<i>Boston & Maine.</i>)	—	—	—	—	—	—	—	—
MILFORD, FRANKLIN & PROV.	—	—	—	—	—	—	—	—
(See <i>N. Y., N. H. & Hartford.</i>)	—	—	—	—	—	—	—	—
MILFORD & WOONSOCKET.	—	—	—	—	—	—	—	—
(See <i>N. Y., N. H. & Hartford.</i>)	—	—	—	—	—	—	—	—
NANTUCKET CENTRAL,† . . .	Nantucket, . .	Siasconset, .	8,500	8,500	—	.200	.200	8,700

1 A narrow-gauge railroad.

* Trackage rights.

† Not in operation.

Description of Railroads Owned and Operated — Continued.

RAILROADS AND BRANCHES. (LEASED ROADS IN ROMAN.) (BRANCHES IN ITALICS.)	1. — TERMINI.		2. — LENGTH OF LINE.		3. — SECOND TRACK.		4. — SIDE TRACK.		5. — Total Length computed as Single Track.
	From	To	Total.	In Massachusetts.	Total.	In Massachusetts.	Total.	In Massachusetts.	
NASHUA, ACTON & BOSTON. (See <i>Boston & Maine</i> .)	-	-	-	-	-	-	-	-	-
NASHUA & LOWELL. (See <i>Boston & Maine</i> .)	-	-	-	-	-	-	-	-	-
NEW ENGLAND. (See <i>N. Y., N. H. & Hartford</i> .)	-	-	-	-	-	-	-	-	-
NEW HAVEN & NORTHAMPTON. (See <i>N. Y., N. H. & Hartford</i> .)	-	-	-	-	-	-	-	-	-
NEW LONDON NORTHERN (operated by the <i>Central Vt. R. R. Co.</i> .)	-	-	-	-	-	-	-	-	-
NEW YORK, NEW HAVEN & HARTFORD.	New London, Ct.,	Brattleboro', Vt.,	121,000	54,900	-	-	38,700	13,500	159,700
<i>Air Line,</i>	W'dlawn J., N. Y.,	Providence, R. I.,	173,770	-	285,690	-	174,220	-	633,680
<i>Berkshire,</i>	New Haven, Ct.,	Springfield, R. I.,	60,170	5,950	60,170	5,950	97,980	8,550	218,320
<i>Berkshire,</i>	New Haven, Ct.,	Williamantic, Ct.,	52,200	-	5,230	-	14,060	-	71,550
<i>Bridgeport,</i>	New Haven, Ct.,	Botsford, Ct.,	24,320	-	830	-	6,550	-	31,700
<i>Brookfield,</i>	Botsford, Ct.,	Mass. State Line,	59,810	-	-	-	16,590	-	76,400
<i>Colchester,</i>	Botsford, Ct.,	Bridgeport, Ct.,	15,160	-	-	-	4,930	-	20,090
<i>Danbury,</i>	Brookfield Jct., Ct.,	Danbury, Ct.,	5,360	-	-	-	1,160	-	6,520
<i>Franklin,</i>	Turnerville, Ct.,	Colchester, Ct.,	3,590	-	-	-	1,030	-	4,620
<i>Harbor Jct.,</i>	Danbury, Ct.,	South Norwalk, Ct.,	23,590	-	-	-	15,670	-	39,260
<i>Harrisville,</i>	Valley Falls, R. I.,	Mass. State Line,	7,070	-	-	-	830	-	7,900
<i>Litchfield,</i>	Andum, R. I.,	Providence, R. I.,	3,580	-	1,660	-	1,080	-	6,320
<i>Meriden,</i>	Woonsocket, R. I.,	Harrisville, R. I.,	9,450	-	-	-	1,220	-	10,670
<i>Middletown,</i>	Bethel, Ct.,	Litchfield, Ct.,	38,230	-	-	-	4,510	-	42,740
<i>Naugatuck,</i>	Westfield, Ct.,	Waterbury, Ct.,	26,000	-	-	-	5,520	-	31,520
<i>New Britain,</i>	Berlin, Ct.,	Middletown, Ct.,	9,700	-	-	-	6,830	-	16,530
<i>New Canaan,</i>	Naugatuck Jct., Ct.,	Winsted, Ct.,	56,120	-	20,820	-	35,860	-	112,800
<i>Pascoag,</i>	Berlin, Ct.,	New Britain, Ct.,	3,180	-	3,180	-	9,270	-	15,630
	Stamford, Ct.,	New Canaan, Ct.,	7,660	-	-	-	1,020	-	8,680
	Providence, R. I.,	Douglas Jct.,	27,730	1,630	-	-	6,000	700	33,730

<i>Pawtucket Valley, R. R.,</i>	Auburn, R. I.,	Pontiac, R. I.,	4,690	—	—	—	1,390	—	5,080
<i>Pawtucket Valley, R. R.,</i>	Pontiac, R. I.,	Hope, R. I.,	5,670	—	—	—	1,450	—	7,120
<i>Ridgefield, . . .</i>	Branchville, Ct.,	Ridgefield, Ct.,	3,970	—	—	—	590	—	4,560
<i>Rockville, . . .</i>	Vernon, Ct.,	Rockville, Ct.,	4,430	—	—	—	1,460	—	5,890
<i>Stonington Loop, . . .</i>	Stonington, Ct.,	Stonington, Ct.,	.970	—	—	—	—	—	.970
<i>Suffield, . . .</i>	Windsor Locks, Ct.,	Suffield, Ct.,	4,320	—	—	—	1,170	—	5,490
<i>Valley, . . .</i>	Hartford, Ct.,	Fenwick, Ct.,	46,200	—	—	—	10,330	—	56,530
<i>Watertown, . . .</i>	Watertown, Ct.,	Watertown, Ct.,	4,440	—	—	—	.670	—	5,110
<i>Wilson's Point, . . .</i>	South Norwalk, Ct.,	Wilson's Point, Ct.,	2,690	—	—	—	4,700	—	7,390
	Conn. State Line, Mass.,	New York State Line, Mass.,							
Berkshire, . . .	Vanduesenville, . . .	Pittsfield, . . .	23,170	23,170	—	—	7,850	7,850	31,020
Boston & Albany,*	Ashland, . . .	Ashland, . . .	22,020	22,020	—	—	13,090	13,090	35,110
Boston & Albany,*	Springfield Jct., . . .	Springfield, . . .	.220	.220	—	—	.220	.220	.590
Boston & Albany,*	Worcester Jct., . . .	Worcester, . . .	.590	.590	—	—	—	—	.590
Boston & Maine,*	Shelburne Jct., . . .	Shelburne Falls, . . .	.150	.150	.150	—	—	—	.300
Boston & Maine,*	Lowell Jct., . . .	Lowell, . . .	4,670	4,670	—	—	—	—	4,670
Boston & Maine,*	Sterling Jct., . . .	Worcester, . . .	.570	.570	—	—	—	—	.570
Boston & Providence, . . .	Boston, . . .	Providence, R. I., . . .	11,940	11,940	11,940	—	—	—	23,880
<i>Connection with New England R. R.,</i>			41,890 ³	38,700	69,750 ³	62,260 ⁴	68,030	51,230	179,670
<i>Dedham, . . .</i>	Readville, . . .	Readville, . . .	1,200	1,200	1,200	1,200	—	—	2,400
<i>India Point, . . .</i>	Readville, . . .	Dedham, . . .	2,470	2,470	2,470	2,470	17,170	17,170	22,110
<i>Stoughton, . . .</i>	East Junction, . . .	India Point, R. I., . . .	8,050	3,490	—	—	7,940	.290	15,990
<i>West Roxbury, . . .</i>	Canton Jct., . . .	Stoughton, . . .	4,050	4,050	4,050	4,050	3,370	3,370	11,470
Boston Terminal,*	Forest Hills Sta., . . .	Dedham, . . .	5,370	5,370	5,370	5,370	4,570	4,570	15,310
Boston Terminal,*	Boston Station, . . .	Fort Point Channel, . . .	4,420	.420	1,260 ⁵	1,260 ⁵	—	—	1,680
Chatham, . . .	Chatham, . . .	Harwich, . . .	7,070	7,070	—	—	.990	.990	8,060
Dutchess County,*	Hopewell J., N. Y., . . .	Poughkeepsie J. N. Y., . . .	12,400	—	—	—	—	—	12,400
Harlem River & Port Chester, . . .	Harlem Riv., N. Y., . . .	New Rochelle, N. Y., . . .	11,500	—	14,000 ⁶	—	76,690	—	102,190
Holyoke & Westfield, . . .	Westfield, . . .	Holyoke, . . .	10,320	10,320	—	—	15,530	15,530	25,850
Milford, Franklin & Prov., . . .	Franklin, . . .	Bellingham, . . .	4,650	4,650	—	—	.420	.420	5,070
Milford & Woonsocket, . . .	Ashland, . . .	Bellingham, . . .	15,130	15,130	—	—	3,420	3,420	18,550
Newburg, Dutch. & Conn.,* . . .	Hopewell J., N. Y., . . .	Wicopee J., N. Y., . . .	10,950	—	—	—	—	—	10,950

¹ Including 55,960 miles of third track and 55,960 miles of fourth track.² Including only one-half the length of joint tracks between Providence station and Boston switch, so-called, viz.: 5,000 miles of first or single track; 5,000 miles of second track; 4,300 miles of third track; 4,300 miles of fourth track; these distances being the total length.³ Including 14,030 miles of third track and 13,830 miles of fourth track.⁴ Including 11,880 miles of third track and 11,680 miles of fourth track.⁵ Including .420 mile of third track and .420 mile of fourth track.⁶ Including 1,250 miles of third track and 1,250 miles of fourth track.

* Trackage rights.

Description of Railroads Owned and Operated — Continued.

RAILROADS AND BRANCHES. (LEASED ROADS IN ROMAN.) (BRANCHES IN ITALICS.)	1. — TERMINI.		2. — LENGTH OF LINE.		3. — SECOND TRACK.		4. — SIDE TRACK.		5. — Total Length computed as Single Track.
	From	To	Total.	In Massa- chusetts.	Total.	In Massa- chusetts.	Total.	In Massa- chusetts.	
NEW YORK, NEW HAVEN & HARTFORD — Con.									
New England,	Boston, Worcester J., N. Y., .	Hopewell J., N. Y., Fishkill-on-Hudson, N. Y., .	213.560	50.630	149.480	50.630	167.770	80.990	530.810
Dedham,	Dedham Jct.,	Dedham,	1.800	—	—	—	11.070	—	12.870
Islington,	Islington,	Dedham,	1.530	1.530	—	—	.690	.690	2.220
Melrose,	Melrose, Ct.,	Rockville, Ct., . . .	2,000	2,000	—	—	.110	.110	2.110
Needham Extension, Providence, R. I., . . .	West Roxbury, Providence, R. I., . . .	Rockville, Ct., . . .	7.220	—	—	—	.310	—	7.530
South Boston,	Needham,	Needham,	4.530	4.530	4.100	4.100	.090	.090	8.720
Southbridge,	South Boston,	Williamantic, Ct., . .	57.760	—	1.270	—	23.280	—	82.310
Springfield,	E. Thompson, Ct., . .	South Boston,	1.040	1,040	1.040	1,040	—	—	2.080
Woonsocket,	E. Hartford, Ct., . . .	Southbridge,	17.360	12,010	—	—	3.290	2.780	20.650
New Haven & Northampton, New Hartford,	Cook St., Newton, New Haven, Ct., . . .	Springfield Jct., . . .	28.310	8,140	—	—	7.370	4.430	35.680
Turner's Falls,	Farmington, Ct., . . .	Woonsocket, R. I., . .	28.670	27,600	—	—	8.540	6,220	37.210
Williamsburg,	South Deerfield, . . .	Shelburne Jct., . . .	94.040	43,380	—	—	51.700	25,390	146.340
New York & Harlem,* . .	Northampton,	New Hartford, Ct., . .	14.090	—	—	—	3.750	—	17.840
Norwich & Worcester, Connection with New Lon- don Northern R.R., . .	pot, N. Y.,	Turner's Falls,	10.070	10,070	—	—	2.690	2,690	12.760
	Worcester,	Williamsburg,	7.510	7,510	—	—	2.440	2,440	9.950
	Norwich, Ct.,	Woodlawn J., N. Y., .	12.030	—	36.090 ¹	—	—	—	48.120
	Boston,	Groton Jct., Ct., . . .	70.970	17,830	—	—	38.440	11,600	109.410
	Mayflower Park, Middleborough,	Norwich, Ct., . . . .	.630	—	—	—	.270	—	.900
	Raynham,	Newport, R. I., . . .	67.000	51,410	52.610 ²	52.610 ²	65.190	58,370	185.400
	Braintree,	Somerset Jct.,	36.310	36,310	26.920 ³	26.920 ³	34.180	34,180	97.410
	South Braintree, Framingham,	Provincetown,	85.660	85,660	19.720	19,720	12.780	12,780	118.160
	New Bedford,	Whittenton Jct., . . .	3.380	3,380	3.380	3,380	1.180	1,180	7.940
		Kingston,	32.340	32,340	11.710	11,710	6.900	6,900	50.950
		Plymouth,	26.040	26,040	14.150	14,150	8.590	8,590	48.780
		Lowell,	26.120	26,120	4.360	4,360	12.730	12,730	48.210
		Fitchburg,	91.250	91,250	57.070 ⁴	57.070 ⁴	67.100	67,100	215.420

UNION FREIGHT, VERMONT & MASSACHUSETTS. (See <i>Boston & Maine</i> .)	Boston,	.	.	Boston,	.	.	2.296	2.296	.829	1.033	1.033	4.158
WARE RIVER. (See <i>Boston & Albany — N. Y. Central & H. R., Lessee</i> .)	—	—	—	—	—	—	—	—	—	—	—	—
WORCESTER, NASHUA & ROCHESTER. (See <i>Boston & Maine</i> .)	—	—	—	—	—	—	—	—	—	—	—	—
TOTALS,	4,935.675	2,133.695	1,732.659	2,957.890	1,535.100	9,626.224

¹ Including only one-half the length of joint tracks between Providence station and Boston switch, so-called, viz.: 5.000 miles of first or single track; 5.000 miles of second track; 4.300 miles of third track; 4.300 miles of fourth track; these distances being the total length.

² Including 2.150 miles of third track and 2.150 miles of fourth track.

NOTE.—The 1,732.659 miles of second track owned and operated, as given in the above totals, include 124.200 miles of third track and 110.080 miles of fourth track. The 985.559 miles of second track in *Massachusetts* include 43.340 miles of third track and 36.540 miles of fourth track.

TABULATED STATEMENTS FROM RETURNS OF RAILROAD CORPORATIONS.

OPERATING RAILROADS.		6.—ATTLEBOROUGH BRANCH.*	7.—BOSTON & ALBANY.†	8.—BOSTON & MAINE.	9.—BOSTON, REVERE BEACH & LYNN.‡
ASSETS.					
Construction, . . . . .	.	\$121,779 19	—	\$44,595,188 25	\$1,644,106 12
Equipment, . . . . .	.	—¹	—	12,699,266 04	389,434 89
Lands, . . . . .	.	—	—	1,383,873 13	80,970 75
Stocks and bonds of other companies, . . . . .	.	—	—	10,102,345 18	—
Other permanent property, . . . . .	.	—	—	121,521 67	—
<i>Total permanent investments,</i> . . . . .	.	121,779 19	—	68,902,194 27	2,114,511 76
Cash and current assets, . . . . .	.	12,179 63	—	11,114,458 55	175,155 93
Miscellaneous assets, . . . . .	.	—	—	5,760,496 15	44,235 26
GROSS ASSETS, . . . . .	.	133,958 82	—	85,777,148 97	2,333,902 95
LIABILITIES.					
Capital stock, common, . . . . .	.	\$131,700 00	—	\$27,872,365 70 ²	\$850,000 00
preferred, . . . . .	.	—	—	3,149,800 00	—
<i>Total capital stock,</i> . . . . .	.	131,700 00	—	31,022,165 70	850,000 00
Funded debt, . . . . .	.	—	—	30,486,500 00	850,000 00
Real estate mortgages, . . . . .	.	—	—	—	—
Current liabilities, . . . . .	.	—	—	11,249,546 07	464,612 81
Accrued liabilities, . . . . .	.	—	—	3,043,082 84 ³	25,500 00
<i>Total indebtedness,</i> . . . . .	.	—	—	44,779,128 91	1,340,112 81
Sinking and other special funds, . . . . .	.	—	—	1,478,815 52	80,000 00
GROSS LIABILITIES, . . . . .	.	131,700 00	—	77,280,110 13	2,270,112 81
INCOME.					
Revenue from passengers, . . . . .	.	\$17,435 64	\$4,545,104 78	\$13,584,164 47 ⁴	\$799,561 17
from mails, . . . . .	.	—	475,464 61	526,908 82	—
from express, . . . . .	.	—	410,482 59	1,362,116 83	—
from extra baggage and storage, . . . . .	.	—	47,959 50	150,304 89	—
from other passenger service, . . . . .	.	—	39,827 85	—	—
<i>Total passenger revenue,</i> . . . . .	.	17,435 64	5,518,839 33	15,623,495 01 ⁶	799,561 17

Revenue from freight, from other freight service,	2,975 00	6,569,645 47	24,843,606 27	-
<i>Total freight revenue,</i>	-	8,818 39	369,236 58	-
<i>Total passenger and freight revenue,</i>	2,975 00	6,578,463 86	25,212,842 85	-
Other earnings from operation,	20,410 64	12,097,303 19	40,836,337 86	799,561 17
<i>Gross earnings from operation,</i>	143 00	392,143 43	288,918 64	-
Income from other sources,	20,553 64	12,489,446 62	41,125,256 50	799,561 17
GROSS INCOME,	20,553 64	12,489,446 62	704,358 98	19,511 87
EXPENDITURES.			41,829,615 48	819,073 04
Operating expenses,	\$12,957 21	\$10,154,199 01	\$30,968,397 46 ^a	\$713,491 95
Interest on funded and other debts,	-	-	1,445,511 51	47,854 66
Taxes,	2,270 27	1,023,944 42	1,674,835 61	13,948 85
Rentals paid,	-	2,411,352 61	5,112,890 29	-
Other charges upon income,	-	122,499 98	522,033 88	-
Dividends paid,	-	-	1,973,332 16	42,500 00
GROSS EXPENDITURES,	15,227 48	13,711,996 02	41,697,000 91	817,795 46
CONDENSED EXHIBIT FOR THE YEAR.				
Net income from operation,	\$7,596 43	\$2,335,247 61	\$10,156,859 04	\$86,069 22
Income from other sources,	-	-	704,358 98	19,511 87
<i>Total income above operating expenses,</i>	7,596 43	2,335,247 61	10,861,218 02	105,581 09
Interest, taxes, rentals, and other charges,	2,270 27	3,557,797 01	8,755,271 29	61,803 51
<i>Net divisible income,</i>	5,326 16	1,222,549 40 ^d	2,105,946 73	43,777 58
Amount of dividends declared,	-	-	1,973,332 16	42,500 00
Percentage of dividends declared,	-	-	- ⁷	5.0
SURPLUS FOR THE YEAR,	5,326 16	1,222,549 40 ^d	132,614 57	1,277 58

* Operated by electricity.
† Operations of the New York Central & Hudson River, lessee. For financial statement of the Boston & Albany R. R. Co. see column 16.

† A narrow-gauge railroad.

† Equipment leased.

‡ Includes \$383,775 received for instalments on common capital stock not yet issued.

§ Including amounts which will be due leased roads on termination of leases, \$1,823,679.19.

¶ Includes \$214,115.69 from electric street railways.

§ Includes \$214,629.32 for operating electric street railways.

|| Seven per cent on varying amounts of common capital stock and also on instalments received on common capital stock and six per cent on preferred capital stock.

^d Deficit.

Tabulated Statements from Returns of Railroad Corporations — Continued.

OPERATING RAILROADS.	6. — ATTLEBOROUGH BRANCH — CONN.	7. — BOSTON & ALBANY — CONN.	8. — BOSTON & MAINE — CONN.	9. — BOSTON, REVERE BEACH & LYNN — CONN.
SURPLUS.				
Surplus June 30, 1906,	\$3,067 34d	—	\$2,591,590 56	\$62,512 56
for the year,	5,326 16	—	132,614 57	1,277 58
Additions during the year,	—	—	845,937 63	—
Deductions during the year,	—	—	132,614 57	—
TOTAL SURPLUS JUNE 30, 1907,	2,258 82	—	8,497,038 84 ²	63,790 14
VOLUME OF TRAFFIC, ETC.				
Passengers carried,	345,156	11,182,911	46,126,992 ³	13,142,239
average length of journey,	3.187 miles.	25.176 miles.	17.920 miles. ⁴	5.865 miles.
Total passenger mileage,	295,652	281,540,774	762,517,704 ⁴	77,089,336
Average fare per mile for local tickets,	—	1.519 cents.	1.861 cents. ⁴	1.036 cents.
for mileage tickets,	—	2.000 "	2.000 "	—
for time and commutation tickets,	—	.880 "	— ⁵	—
for interline tickets,	—	1.814 "	1.912 cents.	—
Passengers carried to Boston,	—	3,936,768	10,994,548	5,512,844
from Boston,	—	3,919,131	11,436,408	5,512,844
Tons of freight hauled,	19,664	6,798,201	23,262,949	—
average length of haul,	3.162 miles.	110.020 miles.	98.740 miles.	—
Total freight mileage,	62,186	747,943,525	2,296,970,964	—
Average rate per ton mile, local freight,	—	2.513 cents.	1.692 cents.	—
interline freight,	—	.709 "	.782 "	—
Miles run by passenger trains,	93,559	3,604,954	12,158,394 ⁴	920,815
by freight trains,	1,921	2,917,184	10,015,586	—
by mixed trains,	—	39,586	125,159	—
Total mileage of trains earning revenue,	95,480	6,561,724	22,299,139	920,815

Miles run by switching trains,	—	861,217	8,479,334	—
by construction and other trains,	—	138,396	1,881,807	5,900
<i>Total train mileage,</i>	95,480	7,561,337	32,660,280	926,715
EQUIPMENT.				
Number of locomotives,	— ¹	310	1,073	21
of passenger and combination cars,	—	306	1,292	98
of dining, parlor and sleeping cars,	—	3	22	—
of baggage, express and mail cars,	—	87	309	—
of other passenger service cars,	—	10	87	—
of freight cars (basis 8 wheels),	—	3,637	19,955	—
of officers' and pay cars,	—	5	9 ⁶	—
of gravel and other cars,	—	433	843	18
MISCELLANEOUS.				
Whole number of stockholders,	6	—	7,718 ⁷	201
number in Massachusetts,	1	—	4,864 ⁸	183
Amount of stock held in Massachusetts,	\$100 00	—	\$19,231,000 00 ⁹	\$835,800 00
Total miles of road operated,	3,720	392,490	2,288,080 ¹⁰	13,200
operated in Massachusetts,	3,720	336,600	786,590	13,200
Highway grade crossings* in Massachusetts,	18	193	744	10
Average number of employees,	13	6,048	27,038	552

⁶ Including 2 air-brake instruction cars.
⁷ Common, 6,969; preferred, 749.
⁸ Common, 4,258; preferred, 606.
⁹ Common, \$16,670,300; preferred, \$2,560,700.
¹⁰ Includes 45,980 miles electric street railway.
 * Including those on leased lines.
^d Deficit.

¹ Equipment leased.
² Including \$4,939,510.65 for "premium on common stock sold" and \$120,000 for "premium on bonds sold."
³ On steam roads, 42,557,832; on electric street railways 3,569,160.
⁴ Does not include electric street railways.
⁶ Within suburban circuit, 1 to 2 cents; outside suburban circuit, 2 to 2½ cents.

Tabulated Statements from Returns of Railroad Corporations — Continued.

OPERATING RAILROADS.	10.—CENTRAL VERMONT.*	11.—GRAFTON & UPTON.	12.—HOOSAC TUNNEL & WILMING- TON.†	13.—NEW YORK, NEW HAVEN & HART- FORD.	14.—UNION FREIGHT.
ASSETS.					
Construction,	—	\$572,450 00	\$433,629 63	\$78,378,611 83	\$401,069 67
Equipment,	—	29,550 00	80,888 57	32,792,939 81 ¹	12,000 00
Lands,	—	—	—	—	—
Stocks and bonds of other companies,	—	—	—	75,783,531 16	13,000 00
Other permanent property,	—	—	—	66,313,548 09 ²	—
<i>Total permanent investments,</i>	—	602,000 00	514,518 20	253,268,630 89	426,069 67
Cash and current assets,	—	6,429 48	82,218 10	88,400,455 20	12,922 31
Miscellaneous assets,	—	—	8,171 85	8,830,207 57	2,177 17
Gross ASSETS,	—	608,429 48	604,908 15	350,499,293 66	441,169 15
LIABILITIES.					
Capital stock, common,	—	\$250,000 00	\$250,000 00	\$121,878,100 00	\$300,000 00
preferred,	—	—	—	—	—
<i>Total capital stock,</i>	—	250,000 00	250,000 00	121,878,100 00	300,000 00
Funded debt,	—	268,000 00	244,000 00	177,138,700 00	—
Real estate mortgages,	—	—	—	—	60,000 00
Current liabilities,	—	84,000 00	37,005 87	17,083,649 32	4,162 33
Accrued liabilities,	—	—	4,066 67	14,737,093 26 ³	2,800 50
<i>Total indebtedness,</i>	—	352,000 00	285,072 54	208,959,442 58	66,962 83
Sinking and other special funds,	—	—	—	1,923,554 92	20,977 06
Gross LIABILITIES,	—	602,000 00	535,072 54	332,761,097 50	387,939 89
INCOME.					
Revenue from passengers,	\$204,660 59	\$33,355 17	\$19,523 17	\$22,263,434 51	—
from mails,	20,411 07	1,159 76	1,191 20	788,650 05	—
from express,	22,609 15	3,738 45	2,505 20	2,137,315 37	—

from extra baggage and storage,	2,571 60	-	-	190,607 36	-
from other passenger service,	-	-	-	1,378,921 77	-
<i>Total passenger revenue,</i>	250,252 41	38,253 38	23,219 57	26,758,929 06	-
Revenue from freight,	798,877 68	55,914 72	74,107 51	27,687,484 56	\$116,745 29
from other freight service,	-	-	-	699,219 82	-
<i>Total freight revenue,</i>	798,877 68	55,914 72	74,107 51	28,386,704 38	116,745 29
<i>Total passenger and freight revenue,</i>	1,049,130 09	94,168 10	97,327 08	55,145,633 44	116,745 29
Other earnings from operation,	37,747 00	1,569 16	-	456,302 88	497 47
<i>Gross earnings from operation,</i>	1,086,877 09	95,737 26	97,327 08	55,601,936 32	117,242 76
Income from other sources,	37,747 00	-	294 20	3,623,442 66	910 00
GROSS INCOME,	1,124,624 09	95,737 26	97,621 28	59,225,378 98	118,152 76
EXPENDITURES.					
Operating expenses,	\$1,007,396 59	\$67,561 78	\$51,643 97	\$37,850,081 71	\$86,807 87
Interest on funded and other debts,	-	15,100 00	12,250 00	4,949,493 15	1,750 13
Taxes,	48,546 18	543 88	1,613 63	2,956,593 84	8,989 83
Rentals paid,	203,952 50	-	-	3,788,640 91	-
Other charges upon income,	-	9,345 51	-	19,877 07	15,000 00
Dividends paid,	-	-	-	7,469,428 00	21,000 00
GROSS EXPENDITURES,	1,259,895 27	92,551 17	65,507 60	57,034,114 68	133,547 83
CONDENSED EXHIBIT FOR THE YEAR.					
Net income from operation,	\$41,733 50	\$28,175 48	\$45,683 11	\$17,751,854 61	\$30,434 89
Income from other sources,	37,747 00	-	294 20	3,623,442 66	910 00
<i>Total income above operating expenses,</i>	79,480 50	28,175 48	45,977 31	21,375,297 27	31,344 89
Interest, taxes, rentals, and other charges,	252,498 68	24,989 39	13,863 63	11,714,604 97	25,739 96
<i>Net divisible income,</i>	173,018 18d	3,186 09	32,113 68	9,660,692 30	5,604 93
Amount of dividends declared,	-	-	-	7,469,428 00	21,000 00
Percentage of dividends declared,	-	-	-	8.0 ⁴	7.0
SURPLUS FOR THE YEAR,	173,018 18d	3,186 09	32,113 68	2,191,264 30	15,395 07d

^d Deficit.

† A narrow-gauge railroad.

² Includes \$13,146,965.62 for obligations to leased roads for equipment and personal property.

⁴ On varying amounts.

* Operating the New London Northern under lease.

¹ Includes \$13,146,965.62 for equipment and personal property of leased lines.

² Includes \$2,229,006.11 for cost of steamships, street railways and other properties.

Tabulated Statements from Returns of Railroad Corporations — Continued.

OPERATING RAILROADS.	10.—CENTRAL VERMONT — Col.	11.—GRAFTON & UPTON — Col.	12.—HOOSAC TUNNEL & WILMING- TON — Col.	13.—NEW YORK, NEW HAVEN & HART- FORD — Col.	14.— UNION FREIGHT — Col.
SURPLUS.					
Surplus June 30, 1907,	—	\$3,243 39	\$37,721 93	\$13,084,445 67	\$53,893 37
for the year,	—	3,186 09	32,113 68	2,191,264 30	15,395 07d
Additions during the year,	—	—	—	5,503,206 26 ¹	14,730 96
Deductions during the year,	—	—	—	3,040,720 07	—
TOTAL SURPLUS JUNE 30, 1907,	—	6,429 48	69,835 61	17,738,196 16	53,229 26
VOLUME OF TRAFFIC, ETC.					
Passengers carried,	313,021	335,557	42,144	75,333,816	—
average length of journey,	16.070 miles.	8.000 miles.	13.990 miles.	18.210 miles.	—
Total passenger mileage,	8,593,419	2,684,456	589,687	1,371,516,126	—
Average fare per mile for local tickets,	2 960 cents.	.900 cent.	4.000 cents.	1.808 cents.	—
for mileage tickets,	2.000 "	—	3.000 "	2.000 "	—
Average fare per mile for time and commuta- tion tickets,	1.560 "	—	2.500 "	.541 cent.	—
Average fare per mile for interline tickets,	2.700 "	—	2.200 "	1.991 cents.	—
Passengers carried to Boston,	—	—	—	11,983,608	—
from Boston,	—	—	—	11,991,883	—
Tons of freight hauled,	1,775,596	120,100	71,418	21,370,230	388,638
average length of haul,	33.760 miles.	9.000 miles.	15.013 miles.	90.200 miles.	1.375 miles.
Total freight mileage,	59,953,987	1,080,900	1,072,220	1,927,686,950	534,377
Average rate per ton mile, local freight,	1.390 cents.	3.000 cents.	—	2.68 cents.	21.847 cents.
interline freight,	1.390 "	2.210 "	—	1.07 "	—

Miles run by passenger trains, . . .	323,567	177,053 ²	32,209	15,991,475	-
by freight trains, . . .	474,448	17,510 ³	7,802	7,877,496	18,573
by mixed trains, . . .	13	-	7,274	238,141	-
<i>Total mileage of trains earning revenue, .</i>	798,028	194,563	47,285	24,107,112	18,573
Miles run by switching trains, . . .	246,281	11,585	-	6,454,511	-
by construction and other trains, .	-	745	308	767,469	-
<i>Total train mileage, . . .</i>	1,044,309	206,893	47,593	31,329,092	18,573
EQUIPMENT.					
Number of locomotives, . . .	9	2	6	1,176	5
of passenger and combination cars, .	19	- ⁴	4	1,604	-
of dining, parlor and sleeping cars, .	-	-	-	202	-
of baggage, express and mail cars, .	2	-	-	296	-
of other cars in passenger service, .	-	-	2	99	-
of freight cars (basis 8 wheels), . .	85	-	115	19,776	-
of officers' and pay cars, . . .	-	-	-	16	-
of gravel and other cars, . . .	37	-	6	1,041	-
MISCELLANEOUS.					
Whole number of stockholders, . . .	-	17	16	14,139	3
number in Massachusetts, . . .	-	15	5	7,084	3
Amount of stock held in Massachusetts, .	-	\$239,200 00	\$800 00	\$35,277,500 00	\$300,000 00
Total miles of road operated, . . .	121,000	19,120	25,000	2,060,170	2,296
operated in Massachusetts, . . .	54,900	19,120	8,220	898,450	2,296
Highway grade crossings * in Massachusetts,	45	29	-	811	-
Average number of employees, . . .	783	36	63	33,784	53

* Including those on leased lines.

¹ Includes \$277,925.28 surplus of the Consolidated Railway Company, June 30, 1906.⁴ Passenger service performed with electric cars furnished by the Milford and Uxbridge Street Railway Company.^d Deficit.² Electric cars.³ Steam trains.

Tabulated Statements from Returns of Railroad Corporations—Continued.

LEASED RAILROADS.*	15.—BERKSHIRE. ¹	16.—BOSTON & ALBANY. ²	17.—BOSTON & LOWELL. ³	18.—BOSTON & PROVIDENCE. ¹	19.—CAPE ANN GRANITE. [†]
ASSETS.					
Construction,	\$1,068,588 68	\$28,015,484 61	\$12,656,695 48	\$4,836,840 96	\$22,381 63
Equipment,	—	3,572,400 00	833,583 94	871,234 35	10,500 00
Other permanent property,	6,520 00	—	1,124,105 50	429,793 36	—
Cash and current assets,	22,350 32	8,417,580 36	574,501 06	260,778 65	—
Other assets and property,	—	1,000,000 00 ⁴	—	—	—
Gross Assets,	1,097,459 00	41,005,464 97	15,188,885 98	6,398,647 32	32,881 63
LIABILITIES.					
Capital stock,	\$1,078,700 00	\$25,000,000 00	\$6,599,400 00	\$4,000,000 00	\$20,000 00
Funded debt,	—	8,485,000 00	6,528,000 00	2,170,000 00	—
Current and accrued liabilities,	16,264 50	94,507 50	415,416 20	144,127 50	13,215 80
Sinking and other special funds,	—	5,882,089 77	210,005 87	—	—
Gross LIABILITIES,	1,094,964 50	39,461,597 27	13,752,822 07	6,314,127 50	33,215 80
INCOME, EXPENDITURES, ETC.					
Total income from all sources,	\$65,867 00	\$2,597,872 50	\$860,960 33	\$490,737 05	— [†]
Total expenses,	—	12,445 41	7,000 00	3,537 05	—
Interest on funded and other debts,	—	315,110 00	326,008 33	86,800 00	—
Rentals, taxes, etc.,	—	82,817 09	—	—	—
<i>Net divisible income,</i>	65,867 00	2,187,500 00	527,952 00	400,400 00	—
Amount of dividends declared,	64,722 00	2,187,500 00	527,952 00	400,000 00	—
Percentage of dividends declared,	6.0	8.75	8.0	10.0	—
<i>Surplus for the year,</i>	1,145 00	—	—	400 00	—
Total surplus, June 30, 1907,	2,494 50	1,543,867 70	1,436,063 91	84,519 82	\$334 17 ^d

* Leased to and operated by ¹ New York, New Haven & Hartford, ² New York Central & Hudson River, ³ Boston & Maine.

⁴ Improvements at East Boston, \$700,000; Cunard dock and wharf property, \$300,000.

[†] Not in operation.

^d Deficit.

Tabulated Statements from Returns of Railroad Corporations — Continued.

LEASED RAILROADS.*	20. — CHATHAM. ¹	21. — CHESTER & BECKET. ²	22. — CONNECTICUT RIVER. ³	23. — FITCHBURG. ³	24. — HOLYOKE & WESTFIELD. ¹
ASSETS.					
Construction,	\$98,435 58	\$136,893 98	\$3,637,259 18	\$40,531,342 68	\$460,000 00
Equipment,	—	—	455,977 66	3,828,354 47	—
Other permanent property,	1,055 55	—	1,129,535 90	2,643,743 45	5,000 00
Cash and current assets,	5,875 23	72 77	185,461 34	354,390 72	31,781 20
Other assets and property,	—	—	—	1,436,034 06	—
Gross Assets,	105,366 36	136,966 75	5,408,234 08	48,793,865 38	496,781 20
LIABILITIES.					
Capital stock,	\$68,200 00	\$50,000 00	\$3,118,000 00	\$24,360,000 00 ⁵	\$260,000 00
Funded debt,	14,000 00	50,000 00	2,261,700 00	22,667,000 00	200,000 00
Current and accrued liabilities,	140 00	73,526 04	222,418 92	773,955 61	5,000 00
Sinking and other special funds,	—	—	—	280,764 95	—
Gross LIABILITIES,	82,340 00	173,526 04	5,602,118 92	48,081,720 56	465,000 00
INCOME, EXPENDITURES, ETC.					
Total income from all sources,	\$4,543 77	\$505 12	\$397,615 00	\$1,796,307 51	\$57,902 82
Total expenses,	151 24	5 25	2,000 00	7,512 77	13,832 50
Interest on funded and other debts,	840 00	4,224 15	84,065 00	920,995 00	8,100 00
Taxes,	157 63	—	—	—	6,215 58
Net divisible income,	3,394 90	3,724 28 ^d	311,550 00	867,799 74	29,754 74
Amount of dividends declared,	1,364 00	—	311,550 00	868,000 00	26,000 00
Percentage of dividends declared,	2.0	—	— ⁴	5.0 ⁶	10.0
Surplus for the year,	2,030 90	3,724 28 ^d	—	200 26 ^d	3,754 74
Total surplus, June 30, 1907,	23,026 36	36,559 29 ^d	193,884 84 ^d	712,144 82 ⁷	31,781 20

* Leased to and operated by ¹New York, New Haven & Hartford, ²Boston & Albany (New York Central & Hudson River, lessee), ³Boston and Maine.⁴ Ten per cent on \$3,110,000 capital stock and six and seven-eighths per cent on \$8,000 capital stock.⁵ Common, \$1,000,000; preferred, \$17,360,000.⁶ On preferred stock.⁷ Crediting \$200.26 and debiting \$681.85.^d Deficit.

Tabulated Statements from Returns of Railroad Corporations—Continued.

LEASED RAILROADS.*	25.—HORN POND BRANCH. ¹	26.—LOWELL & ANDOVER. ¹	27.—MILFORD, FRANKLIN & PROV- DENCE. ²	28.—MILFORD & WOOSOCKET. ²	29.—NANTUCKET CENTRAL. ³
ASSETS.					
Construction,	\$15,238 46	\$767,050 24	\$101,308 23	\$173,381 13	\$35,000 00
Equipment,	—	—	—	—	—
Cash and current assets,	—	2,447 41	283 53	1,296 93	—
Gross Assets,	15,238 46	769,497 65	101,591 76	174,678 06	35,000 00
LIABILITIES.					
Capital stock,	\$2,000 00	\$625,000 00	\$100,000 00	\$148,600 00	\$18,000 00
Funded debt,	—	—	10,000 00	60,000 00	17,000 00
Current and accrued liabilities,	—	—	—	250 00	5,680 00
Gross Liabilities,	2,000 00	625,000 00	110,000 00	208,850 00	40,680 00
INCOME, EXPENDITURES, ETC.					
Total income from all sources,	— ⁴	\$52,677 40	\$600 00	\$3,000 00	— ³
Total expenses,	—	355 90	—	—	—
Interest on funded and other debts,	—	—	600 00	3,000 00	\$1,020 00
Rentals, taxes, etc.,	—	14 31	—	—	—
Net divisible income,	—	52,307 19	—	—	1,020 00d
Amount of dividends declared,	—	56,250 00	—	—	—
Percentage of dividends declared,	—	9.0	—	—	—
Surplus for the year,	—	3,942 81d	—	—	1,020 00d
Total surplus, June 30, 1907,	\$13,238 46	144,497 65	8,408 24d	34,171 94d	5,680 00d

* Leased to and operated by ¹ Boston & Maine, ² New York, New Haven & Hartford.

⁴ Used for the transportation of ice; no income reported.

³ Road not in operation.
d Deficit.

LEASED RAILROADS.*	30.—NASHUA, ACTON & BOSTON.† ¹	31.—NASHUA & LOWELL. ¹	32.—NEW ENG- LAND. ²	33.—NEW HAVEN & NORTHAMPTON. ²	34.—NEW LONDON NORTHERN. ³
ASSETS.					
Construction,	\$1,057,031 20	\$691,242 07	\$42,206,065 47	\$6,377,217 24	\$3,064,629 47
Equipment,	6,257 41	218,242 95	3,302,822 95	750,000 00	248,420 44
Other permanent property,	—	—	—	38,593 75	150,000 00
Cash and current assets,	—	61,538 74	130 00	1,576,902 16	67,822 70
Other assets and property,	—	—	—	—	5,000 00
GROSS ASSETS,	1,063,288 61	971,023 76	45,509,018 42	8,742,713 15	3,540,872 61
LIABILITIES.					
Capital stock,	\$500,000 00	\$800,000 00	\$25,000,000 00 ⁴	\$2,460,000 00	\$1,500,000 00
Funded debt,	500,000 00	—	17,500,000 00 ⁵	3,908,000 00	1,500,000 00
Current and accrued liabilities,	709,982 90	193 50	1,959,979 24	26,750 00	4,493 81
Sinking and other special funds,	—	—	—	884,778 82	—
GROSS LIABILITIES,	1,709,982 90	800,193 50	44,459,979 24	7,279,528 82	3,004,493 81
INCOME, EXPENDITURES, ETC.					
Total income from all sources,	—	\$76,285 57	\$926,485 00	\$223,083 25	\$217,493 92
Total expenses,	—	1,151 50	1,485 00	420 00	5,320 03
Interest on funded and other debts,	—	43 00	775,000 00	107,000 00	68,300 69
Rentals, taxes, etc.,	—	—	—	15,000 00 ⁷	3,000 00
Net divisible income,	—	75,091 07	150,000 00	100,663 25	140,873 20
Amount of dividends declared,	—	76,000 00	150,000 00	98,400 00	135,000 00
Percentage of dividends declared,	—	9.5	3.0 ⁶	4.0	9.0
Surplus for the year,	—	908 93 ^d	—	2,263 25	5,873 20
Total surplus, June 30, 1907,	\$646,694 29 ^d	170,830 26	1,049,039 18	1,463,184 33	536,378 80

* Leased to and operated by ¹ Boston & Maine, ² New York, New Haven & Hartford, ³ Central Vermont.

⁴ Common, \$20,000,000; preferred, \$5,000,000.

^d Deficit.

[†] In process of liquidation.

⁵ Not including \$1,500,000, 4 per cent mortgage bonds of the New York & New England R. R. Co. being an underlying lien on certain terminal lands, on which interest has been paid by the New England R. R. Co. amounting to \$60,000 for the year.

⁶ On preferred stock.

⁷ Payment to sinking fund.

Tabulated Statements from Returns of Railroad Corporations—Continued.

LEASED RAILROADS.*		35.—NORTH BROOKFIELD. ¹	36.—NORWICH & WORCESTER. ²	37.—OLD COLONY. ²	38.—PITTSFIELD & NORTH ADAMS. ¹
ASSETS.					
Construction,	.	\$100,000 00	\$3,983,816 51	\$31,362,567 06	\$438,752 57
Equipment,	.	—	—	3,161,518 83	11,247 43
Other permanent property,	.	—	678,107 08	3,808,414 93	—
Cash and current assets,	.	594 27	104,923 42	514,324 18	—
Other assets and property,	.	—	630,620 32	2,800,000 00	—
GROSS ASSETS,	.	100,594 27	5,397,467 33	41,646,825 00	450,000 00
LIABILITIES.					
Capital stock,	.	\$100,000 00	\$3,006,600 00 ³	\$18,380,125 00 ⁴	\$450,000 00
Funded debt,	.	—	1,200,000 00	15,511,200 00	—
Current and accrued liabilities,	.	—	79,926 00	1,515,749 72	—
GROSS LIABILITIES,	.	100,000 00	4,286,526 00	35,407,074 72	450,000 00
INCOME, EXPENDITURES, ETC.					
Total income from all sources,	.	\$3,009 73	\$291,043 58	\$1,927,661 35	\$22,500 00
Total expenses,	.	3 26	2,623 48	6,543 35	—
Interest on funded and other debts,	.	—	48,000 00	635,120 00	—
Taxes,	.	499 56	—	—	—
Net divisible income,	.	2,506 91	240,420 10	1,285,998 00	22,500 00
Amount of dividends declared,	.	2,500 00	240,000 00	1,285,998 00	22,500 00
Percentage of dividends declared,	.	2.5	8.0	7.0	5.0
Surplus for the year,	.	6 91	420 10	—	—
Total surplus, June 30, 1907,	.	594 27	1,110,941 33	6,239,750 28 ⁵	—

* Leased to and operated by 1 Boston & Albany (New York Central & Hudson River, lessee), 2 New York, New Haven & Hartford.

³ Common, \$6,600; preferred, \$3,000,000.

⁴ Including "common stock liability" of \$8,725.

⁵ Including \$3,620,394.04 for premium received on sale of stock and bonds.

Tabulated Statements from Returns of Railroad Corporations — Continued.

LEASED RAILROADS.*		39. — PLYMOUTH & MIDDLEBOROUGH. ¹	40. — PROVIDENCE, WEBSTER & SPRINGFIELD. ²	41. — PROVIDENCE & WORCESTER. ¹	42. — RHODE ISLAND & MASSACHUSETTS. [†]
ASSETS.					
Construction,	.	\$305,000 00	\$247,361 12	\$4,276,250 00	\$112,321 13
Equipment,	.	—	—	828,887 40	—
Cash and current assets,	.	—	3,618 73	42,430 32	—
Other assets and property,	.	—	—	80,747 97	—
Gross Assets,	.	305,000 00	250,979 85	5,228,315 69	112,321 13
LIABILITIES.					
Capital stock,	.	\$80,000 00	\$160,000 00	\$3,500,000 00	\$100,000 00
Funded debt,	.	225,000 00	—	1,500,000 00	—
Current and accrued liabilities,	.	—	54,014 73	—	—
Gross LIABILITIES,	.	305,000 00	214,014 73	5,000,000 00	100,000 00
INCOME, EXPENDITURES, ETC.					
Total income from all sources,	.	—	\$7,864 90	\$417,402 07	—
Total expenses,	.	—	116 71	5,823 38	—
Interest on funded and other debts,	.	—	1,242 13	60,000 00	—
Rentals, taxes, etc.,	.	—	407 88	—	—
Net divisible income,	.	—	6,098 18	351,578 69	—
Amount of dividends declared,	.	—	—	350,000 00	—
Percentage of dividends declared,	.	—	—	10.0	—
Surplus for the year,	.	—	6,098 18	1,578 69	—
Total surplus, June 30, 1907,	.	—	36,965 12	228,315 69	\$12,321 13

* Leased to and operated by 1 New York, New Haven & Hartford, 2 Boston & Albany (New York Central & Hudson River, lessee).

† This road is virtually owned by the New York, New Haven & Hartford Railroad Company, and its earnings and expenses are included in the return of that company.

Tabulated Statements from Returns of Railroad Corporations—Concluded.

LEASED RAILROADS.*		43.—STONY BROOK. ¹	44.—VERMONT & MASSACHUSETTS. ¹	45.—WARE RIVER. ²	46.—WORCESTER, NASHUA & ROCHESTER. ¹
ASSETS.					
Construction,	.	\$276,601 19	\$3,480,241 45	\$1,115,163 82	\$4,138,584 99
Equipment,	.	21,492 38	261,233 64	—	415,336 03
Other permanent property,	.	—	2,642,272 33	—	—
Cash and current assets,	.	1,064 44	12,102 50	—	81,254 84
GROSS ASSETS,	.	299,158 01	6,395,849 92	1,115,163 82	4,635,175 86
LIABILITIES.					
Capital stock,	.	\$300,000 00	\$3,193,000 00	\$750,000 00	\$3,099,800 00
Funded debt,	.	—	772,000 00	—	1,776,000 00
Current and accrued liabilities,	.	—	12,102 50	365,163 82	31,860 00
GROSS LIABILITIES,	.	300,000 00	3,977,102 50	1,115,163 82	4,907,660 00
INCOME, EXPENDITURES, ETC.					
Total income from all sources,	.	\$21,500 00	\$195,025 50	\$52,500 00	\$250,281 18
Total expenses,	.	375 30	3,445 50	—	2,101 71
Interest on funded and other debts,	.	—	—	—	71,040 00
Net divisible income,	.	21,124 70	191,580 00	52,500 00	177,139 47
Amount of dividends declared,	.	21,000 00	191,580 00	52,500 00	176,203 00
Percentage of dividends declared,	.	7.0	6.0	7.0	5.75
Surplus for the year,	.	124.70	—	—	936 47
Total surplus, June 30, 1907,	.	841 99d	2,418,747 42 ¹	—	272,484 14d

d Deficit.

* Leased to and operated by ¹ Boston & Maine, ² Boston & Albany (New York Central & Hudson River, lessee).

COMPARATIVE AND SUMMARY STATEMENTS

COMPILED FROM

Returns of Railroad Corporations.

COMPARISON OF RETURNS FOR THE YEARS 1906 AND 1907.

MILEAGE, ASSETS, ETC.	1906.	1907.	Increase.	Decrease.
Description of Road Owned.	Miles.	Miles.	Miles.	Miles.
Length of road and branches,	3,950.690 ¹	4,011.775 ¹	61.085	-
in Massachusetts,	2,105.660	2,110.925	5.265	-
Length of second track,*	1,584.857	1,615.199	30.342	-
in Massachusetts,	961.467	972.209	10.742	-
Length of side track,	2,479.887 ²	2,564.900 ³	85.013	-
in Massachusetts,	1,481.757	1,535.100	53.343	-
Total length as single track,	8,015.434 ³	8,191.874 ³	176.440	-
in Massachusetts,	4,548.884	4,618.234	69.350	-
Assets.				
Construction,	\$309,558,390 16	\$326,077,853 15	\$16,519,462 99	-
Equipment,	45,981,040 16	55,056,751 99	9,075,711 83	-
Lands,	1,573,443 77	1,587,463 30	14,019 53	-
Stocks in other companies,	63,581,538 65	66,817,876 95	3,236,338 30	-
Bonds of other companies,	15,786,076 38	26,629,358 11	10,843,281 73	-
Other permanent property,	11,752,817 20	78,522,540 93	66,769,723 73	-
<i>Total permanent investments,</i>	448,233,306 32	554,691,844 43	106,458,538 11	-
Cash on hand,	22,874,078 48	13,800,079 82	-	\$9,073,998 66
Bills receivable,	2,011,885 43	37,338,041 80	35,326,156 37	-
Other current assets,	50,005,950 35	60,993,480 81	10,989,530 46	-
<i>Total cash and current assets,</i>	74,891,914 26	112,133,602 43	37,241,688 17	-
Materials and supplies,	8,009,904 62	8,508,136 36	498,231 74	-
All other assets,	25,111,968 41	12,089,553 99	-	13,022,414 42
<i>Total miscellaneous assets,</i>	33,121,873 03	20,597,690 35	-	12,524,182 68
<i>Gross Assets,</i>	\$556,247,093 61	\$687,423,137 21	\$131,176,043 60	-
Profit and loss balance (deficit),	1,198,491 11	1,199,058 90	567 79	-
<i>Total as per balance sheet,</i>	\$557,445,584 72	\$688,622,196 11	\$131,176,611 39	-
Liabilities.				
Capital stock, common,	\$213,524,135 72	\$254,999,590 70	\$41,475,454 98	-
preferred,	28,509,800 00	28,509,800 00	-	-
<i>Total capital stock,</i>	242,033,935 72	283,509,390 70	41,475,454 98	-
Funded debt,	213,182,068 91	297,342,100 00	84,160,031 09	-
Real estate mortgages,	683,300 00	60,000 00	-	\$623,300 00
Current liabilities,	41,158,344 34	34,983,291 79	-	6,175,052 55
Accrued liabilities,	13,911,481 87	18,276,946 17	4,365,464 30	-
<i>Total indebtedness,†</i>	268,935,195 12	350,662,337 96	81,727,142 84	-
<i>Gross Liabilities,</i>	\$510,969,130 84	\$634,171,728 66	\$123,202,597 82	-
Profit and loss balance (surplus),	46,476,453 88	54,450,467 45	7,974,013 57	-
<i>Total as per balance sheet,</i>	\$557,445,584 72	\$688,622,196 11	\$131,176,611 39	-
Income.				
From passengers,	\$39,799,893 834	\$41,467,239 507	\$1,667,405 67	-
mails,	1,813,640 22	1,813,785 51	145 29	-
express,	3,584,938 49	3,988,767 59	353,829 10	-
extra baggage and storage,	379,210 36	391,443 35	12,232 99	-
other passenger service,	1,284,393 31	1,418,749 62	134,356 31	-
<i>Total passenger revenue,</i>	46,862,016 21 ⁵	49,029,985 57 ⁶	2,167,969 36	-
From freight,	56,863,494 61	60,149,356 50	3,285,861 89	-
other freight service,	1,043,515 63	1,077,274 79	33,759 16	-
<i>Total freight revenue,</i>	57,907,010 24	61,226,631 29	3,319,621 05	-
Other earnings from operation,	1,185,425 08	1,177,321 58	-	\$8,103 50
<i>Total earnings from operation,</i>	105,954,451 53 ⁷	111,433,938 44 ⁸	5,479,486 91	-
Rentals from lease of road,	10,755,547 32	10,748,321 77	-	7,225 55
Income from other sources,	3,023,552 01	4,560,920 49	1,537,368 48	-
<i>Gross Income,</i>	\$119,733,550 86	\$126,743,180 70	\$7,009,629 84	-

* Including third and fourth main track.

† Exclusive of sinking and other special funds.

¹ Includes 18.100 miles electric street railway owned by the Boston & Maine.² Includes 1.150 miles electric street railway owned by the Boston & Maine.³ Includes electric street railway owned by the Boston & Maine.⁴ Includes \$203,386.40, earnings from passengers on electric street railways operated by the Boston & Maine.⁵ Includes \$203,891.34, earnings on electric street railways operated by the Boston & Maine.⁶ Includes 1.140 miles electric street railway owned by the Boston & Maine.⁷ Includes \$214,115.69, earnings of electric street railways operated by the Boston & Maine.⁸ Includes \$214,629.32, earnings on electric street railways operated by the Boston & Maine.

COMPARISON OF RETURNS, ETC.—Concluded.

EXPENDITURES, ETC.	1906.	1907.	Increase.	Decrease.
Expenditures.				
Operating expenses,	\$73,885,984 85 ¹	\$80,912,537 55 ²	\$7,026,552 70	-
Interest on debt and loans,	8,140,914 48	9,988,367 06	1,847,452 58	-
Taxes,	5,954,528 24	5,738,581 47	-	\$215,946 77
Rentals paid,	11,695,914 53	11,594,836 31	-	101,078 22
Other charges on income,	3,707,686 21	787,923 56	-	2,919,762 65
Total charges on income,	29,499,043 46	28,109,708 40	-	1,389,335 06
Dividends paid,	15,551,107 00	16,751,279 16	1,200,172 16	-
Gross Expenditures,	\$118,936,135 31	\$125,773,525 11	\$6,837,389 80	-
Condensed Exhibit for the Year.				
Gross earnings from operation,	\$105,954,451 53 ³	\$111,433,938 44 ²	\$5,479,486 91	-
Operating expenses,	73,885,984 85 ²	80,912,537 55 ²	7,026,552 70	-
Net earnings from operation,	32,068,466 68	30,521,400 89	-	\$1,547,065 79
Income from all other sources,	13,779,099 33	15,309,242 26	1,530,142 93	-
Total income above operating ex- penses,	45,847,566 01	45,830,643 15	-	16,922 86
Interest, taxes and other charges, . . .	29,499,043 46	28,109,708 40	-	1,389,335 06
Net divisible income,	16,348,522 55	17,720,934 75	1,372,412 20	-
Amount of dividends declared,	15,551,107 00	16,751,279 16	1,200,172 16	-
Surplus for the year,	\$797,415 55	\$969,655 59	\$172,240 04	-
Percentage of dividend earned,	6.76	6.25	-	0.51
of dividend declared,	6.43	5.91	-	0.52
Volume of Traffic.				
Miles run by passenger trains,	31,826,631	33,302,026	1,475,395	-
by freight trains,	20,221,538	21,330,520	1,108,982	-
by mixed trains,	413,577	410,173	-	3,404
by other trains,	16,924,573	18,847,553	1,922,980	-
Total train mileage,	69,386,319	73,890,272	4,503,953	-
Total passengers carried,	137,834,000 ³	146,821,836 ⁴	8,987,836	-
passenger mileage,	2,342,560,774 ⁴	2,505,631,328 ⁴	163,070,554	-
Total tons of freight hauled,	50,464,667	53,806,796	3,342,129	-
freight mileage,	4,613,873,938	5,035,305,109	421,431,171	-
Equipment, etc.				
Locomotives,	2,509	2,604	95	-
Passenger cars,	3,610	3,751	141	-
Baggage and mail cars,	702	695	-	7
Freight cars (basis 8 wheels),	40,203	43,586	3,383	-
All other cars,	1,976	2,410	434	-
Stock held in Massachusetts,	\$131,672,118 00	\$141,190,100 00	\$9,517,982 00	-
Total number of stockholders,	50,955	52,186	1,231	-
in Massachusetts,	36,726	37,261	535	-
Average number of employees,	63,575	68,370	4,795	-
Total miles of road operated,	4,931.960 ⁵	4,925.739 ⁵	-	6.221
in Massachusetts,	2,128.430	2,123.759	-	4.671
Total miles of track operated,	9,526.764 ⁶	9,615.307 ⁹	88.543	-
in Massachusetts,	4,585.004	4,643.437	58.433	-
Highway crossings at grade,*	1,868	1,857	-	11
protected,	1,100	1,101	1	-
unprotected,	768	756	-	12

* In Massachusetts.

¹ Includes \$213,897.88 for electric street railways operated by the Boston & Maine.² Includes earnings and expenses of electric street railways operated by the Boston & Maine.³ Includes 3,249,179 passengers carried on electric street railways operated by the Boston & Maine.⁴ Does not include mileage of passengers carried on electric street railways operated by the Boston & Maine.⁵ Includes 45,980 miles electric street railway operated by the Boston & Maine.⁶ Includes 49,560 miles electric street railway operated by the Boston & Maine.⁷ Includes \$214,006.66 for electric street railways operated by the Boston & Maine.⁸ Includes 3,569,160 passengers carried on electric street railways operated by the Boston & Maine.⁹ Includes 49,410 miles electric street railway operated by the Boston & Maine.

SUMMARY OF RETURNS FOR THE YEARS 1901 TO 1907, INCLUSIVE.

MILEAGE, ASSETS, LIABILITIES, ETC.		1901.	1902.	1903.	1904.	1905.	1906.	1907.
Railroad Mileage.								
Miles of main and branch line in Massachusetts,		2,107,510	2,106,450	2,110,960	2,108,420	2,105,100	2,105,660	2,110,925
of second track, *		935,197	939,237	941,937	943,947	949,957	961,467	972,209
of side track, *		1,373,517	1,301,157	1,416,687	1,437,937	1,435,087	1,481,757	1,535,100
Total track in Massachusetts, *		4,416,224	4,436,844	4,469,584	4,490,304	4,490,144	4,548,884	4,618,234
Assets.								
Cost of construction,		\$288,850,804 00	\$289,699,626 69	\$293,236,332 43	\$287,892,759 18	\$292,366,558 13	\$309,558,390 16	\$326,077,853 15
of equipment,		29,024,463 27	29,057,279 12	32,957,121 82	41,205,887 11	44,900,313 70	45,981,040 16	55,056,751 99
of other permanent property,		45,177,895 27	44,789,943 19	46,087,992 05	63,914,769 57	82,400,475 15	92,683,876 10	173,557,239 29
Total permanent investments,		363,053,162 54	363,546,849 00	372,281,446 30	393,013,415 86	419,676,346 98	448,233,306 32	634,691,844 43
Cash and current assets,		37,413,016 83	35,908,659 11	40,880,067 42	36,191,442 93	36,279,866 61	74,891,914 26	112,133,602 43
Miscellaneous assets,		19,277,341 86	918,842,766 00	19,619,335 55	27,791,257 21	28,754,467 07	33,121,873 03	20,597,690 35
Gross Assets,		419,745,321 23	418,298,274 11	432,780,849 27	456,996,116 00	484,710,680 66	556,247,093 61	687,423,137 21
Liabilities.								
Capital stock,		\$210,305,885 72	\$210,736,785 72	\$235,834,465 72	\$237,423,885 72	\$238,223,885 72	\$242,033,935 72	\$283,509,390 70
Funded debt,		148,479,014 96	149,777,541 66	133,435,355 01	152,841,358 41	159,098,293 91	213,182,068 91	297,342,100 00
Real estate mortgages,		858,300 00	858,300 00	858,300 00	683,300 00	683,300 00	683,300 00	60,000 00
Current and accrued liabilities,		25,774,086 24	21,744,041 12	24,149,018 43	25,645,321 15	43,081,816 75	55,069,826 21	53,260,237 96
Total indebtedness,		173,111,401 20	172,373,882 78	158,442,673 44	179,089,979 56	202,863,410 66	268,935,195 12	350,662,337 96
Gross Liabilities,†		383,417,286 92	384,277,139 16	416,033,865 28	416,033,865 28	441,087,296 38	510,969,130 84	634,171,728 66
Surplus,‡		34,326,234 31	35,191,605 61	38,503,170 11	40,402,250 72	43,623,384 28	45,277,962 77	53,251,408 55
Net debt,		\$137,698,384 37	\$136,471,223 67	\$117,562,606 02	\$142,378,536 63	\$166,583,544 05	\$194,043,280 86	\$238,528,735 53
General Exhibit for the Year.								
Total earnings from operation,		\$82,385,586 45	\$86,920,564 97	\$93,325,931 50	\$95,380,348 00	\$98,899,224 88	\$105,954,451 53	\$111,433,338 44
Operating expenses,		57,293,590 83	61,355,821 10	67,774,863 74	69,143,284 60	71,398,455 26	73,885,984 85	80,912,537 55
Net earnings from operation,		25,091,995 62	25,564,743 87	25,551,067 76	26,236,063 40	27,500,769 62	32,068,466 68	30,521,400 89
Rentals from lease of road,		10,557,324 47	10,674,846 80	10,673,454 99	11,036,385 20	10,881,486 06	10,753,547 32	10,743,321 77
Income from all other sources,		1,364,653 78	1,779,610 40	1,641,616 02	1,754,656 30	2,062,693 22	3,023,552 01	4,360,920 40
Total income above operating expenses,		37,013,973 87	38,019,201 07	37,866,138 77	38,946,314 90	40,449,318 90	45,847,566 01	45,830,543 15
Interest on debt and loans,		6,410,410 63	6,654,454 24	6,533,984 59	6,526,802 91	7,119,751 44	8,140,914 48	9,988,367 06
Taxes,		4,440,370 18	5,056,901 77	5,017,971 42	5,102,555 01	5,355,383 89	5,738,581 47	6,788,581 47
Rentals paid,		11,967,615 91	12,265,186 84	12,287,658 05	12,237,575 59	11,939,934 04	11,695,914 53	11,594,836 31
Other charges upon income,		221,360 25	224,317 12	247,556 46	258,743 42	334,994 57	3,707,686 21	787,323 56
Total charges upon income,		23,844,946 97	24,200,859 97	24,067,170 52	24,124,054 93	24,770,032 94	29,409,043 46	28,109,708 40
Net divisible income,		13,229,626 90	13,818,341 10	13,778,968 25	14,821,359 97	15,679,265 96	16,348,522 55	17,720,634 75

Amount of dividends declared,	13,049,306 39	13,201,263 50	13,495,188 50	14,985,815 50	15,431,929 50	15,551,107 00	16,751,279 16
Gross income from all sources,	93,367,564 70	99,375,022 17	105,641,002 51	108,091,399 50	111,842,804 16	119,733,550 86	126,743,180 70
Gross expenditures,	93,827,244 19	98,757,944 57	105,357,222 76	108,256,055 03	111,595,467 70	118,936,135 81	125,773,525 11
<i>Surplus for the year,</i>	480,320 51	617,077 60	288,779 75	164,455 53d	247,336 46	797,415 55	969,655 59
Percentage of dividends earned,	6.40	6.56	5.97§	6.24	6.53	6.76	6.25
of dividends declared,	6.20	6.26	5.93§	6.31	6.48	6.43	5.91
Stock held in Massachusetts,	\$119,748,700 00	\$119,816,300 00	\$122,393,300 00	\$128,102,900 00	\$129,055,425 00	\$131,672,118 00	\$141,190,100 00
Total number of stockholders,	48,431	48,544	49,898	50,827	50,691	50,955	52,186
in Massachusetts,	35,113	35,098	35,913	36,828	36,201	36,726	37,261
Volume of Traffic.							
Miles run by passenger trains,	28,415,913	29,536,169	30,817,100	31,791,218	31,462,200	31,826,631	33,302,026
by freight trains,	16,288,353	16,916,440	18,198,160	18,993,842	19,225,188	20,221,538	21,330,520
by mixed trains,	448,627	460,473	433,236	341,814	391,264	413,577	410,173
<i>Total revenue-train mileage,</i>	45,152,893	46,913,082	49,448,496	51,126,874	51,078,652	52,461,746	55,042,719
Miles run by other trains,	15,888,988	17,082,739	18,031,805	17,874,984	16,565,460	16,924,573	18,847,553
<i>Total train mileage,</i>	61,041,881	63,945,821	67,480,301	69,001,858	67,644,112	69,386,319	73,890,272
Passengers carried,	108,758,528	115,645,897	123,162,793	124,483,665	127,439,566	137,834,000	146,821,836
Average length of journey (miles),	17.09	17.14	17.16	17.49	17.75	17.41	17.49
<i>Total passenger mileage,</i>	1,859,200,923	1,982,170,406	2,112,874,395	2,133,524,260	2,205,586,782	2,342,560,774	2,505,631,328
Average fare per mile (cents),	1.75	1.73	1.73	1.72	1.70	1.70	1.65
Passengers to and from Boston,	51,669,032	53,502,206	55,236,722	56,415,252	57,813,055	61,864,066	65,288,034
Tons of freight hauled,	39,463,814	41,440,170	43,992,978	48,727,514	45,874,649	50,464,667	53,806,796
Average length of haul (miles),	89.07	86.70	89.31	90.22	92.31	91.43	93.58
<i>Total freight mileage,</i>	3,515,066,493	3,592,963,862	3,928,993,919	3,945,026,293	4,234,491,283	4,613,873,938	5,035,306,109
Average rate per ton mile (cents),	1.20	1.24	1.23	1.27	1.14	1.23	1.19
Equipment.							
Number of employees,	53,564	56,388	58,888	60,156	61,564	63,575	68,370
of locomotives,	2,169	2,202	2,277	2,300	2,528	2,509	2,604
of passenger cars,	3,255	3,263	3,338	3,508	3,528	3,510	3,751
of baggage, express and mail cars,	566	627	650	654	686	702	695
of freight cars (basis 8 wheels),	33,801	33,452	37,825	37,938	37,009	40,203	43,586
of all other cars,	1,850	1,801	1,865	1,887	1,947	1,976	2,410

- * Including third and fourth main track.
† Exclusive of sinking and other special funds.
‡ Includes sinking and other special funds and premium on sales of stock and bonds.
§ Not including instalments on common stock to be issued.
1 Does not include electric street railways operated by the Boston & Maine.
2 Does not include electric street railways operated by the Boston & Maine.
3 Includes 2,567,808 passengers carried on electric street railways operated by the Boston & Maine.
4 Includes 3,205,229 passengers carried on electric street railways operated by the Boston & Maine.
5 Includes 3,249,179 passengers carried on electric street railways operated by the Boston & Maine.
6 Includes 3,569,160 passengers carried on electric street railways operated by the Boston & Maine.
d Deficit.

TABULATED STATEMENTS

COMPILED FROM THE

Returns of Street Railway Companies

FOR THE

YEAR ENDING SEPTEMBER 30, 1907.

TABULATED STATEMENTS FROM RETURNS OF STREET RAILWAY COMPANIES.

ASSETS SEPTEMBER 30, 1907.

RAILWAY COMPANIES.

	1. — Construc- tion.	2. — Equipment.	3. — Land and Buildings.	4. — Other Permanent Prop- erty.	5. — Cash and Current Assets.	6. — Miscel- laneous Assets.	7. — Gross Assets.
1 Amesbury & Hampton,	\$157,340 23	\$29,906 61	\$53,071 41	—	\$23,714 16	—	\$264,032 41
2 Amherst & Sunderland,* 1	146,190 47	43,983 74	39,124 45	—	1,805 72	—	231,104 38
3 Athol & Orange,	93,914 03	37,522 58	8,548 22	\$17,000 00	9,966 10	\$750 00	167,700 93
4 Berkshire,	2,053,527 72	523,896 09	692,131 16	58,693 63	58,090 89	99,939 69	3,486,279 18
5 Blue Hill,	404,085 86	134,820 31	111,829 33	—	16,673 64	17,853 33	685,262 47
6 Boston & Chelsea,	121,000 00	—	—	—	—	—	121,000 00
7 Boston Elevated,	12,350,453 27	2,256,922 23	7,541,767 66	495,722 11	3,108,549 74	4,644,924 80	30,398,339 81
8 Boston & Northern,	13,656,358 17	5,579,549 16	4,385,372 16	175,351 93	623,330 01	709,718 18	25,129,679 61
9 Boston & Revere Electric,	73,815 23	9,919 79	4,701 80	—	200 00	—	88,636 82
10 Boston & Worcester,	2,897,908 54	655,989 69	878,493 49	—	113,131 31	70,461 55	4,615,984 58
11 Bristol & Norfolk,	141,046 49	7,040 76	7,002 45	2,430 09	2,058 95	—	159,578 74
12 Brockton & Plymouth,	385,677 23	103,870 09	225,667 35	28,241 15	34,875 86	9,539 99	787,871 67
13 Citizens' Electric,	331,850 18	96,973 06	123,808 07	—	23,576 88	5,574 04	581,782 23
14 Connecticut Valley,	842,643 28	175,299 70	143,614 02	358 48	18,512 16	22,404 56	1,202,832 20
15 Concord, Maynard & Hudson,	226,452 44	96,301 04	108,561 50	—	7,919 42	9,137 83	448,372 23
16 Conway Electric,	74,488 70	11,026 79	9,457 21	97,554 22	2,650 74	—	195,177 66
17 Cottage City & Edgartown Traction,	44,924 13	10,751 09	4,745 60	—	1,708 89	383 01	62,512 72
18 Dartmouth & Westport,	315,401 30	132,424 25	27,424 63	22,282 76	70,733 57	1,003 75	564,870 26
19 Dedham & Franklin,	117,352 95	21,019 31	36,246 74	—	1,427 96	1,293 60	177,340 56
20 East Middlesex,	344,518 03	102,105 79	58,662 11	—	2,296 14	222 00	507,804 07
21 East Taunton,	147,832 07	24,660 35	6,251 02	—	6,326 32	—	185,069 76
22 Fitchburg & Leominster,	817,404 95	225,942 40	234,799 87	97,351 54	23,262 74	42,225 21	1,440,986 71
23 Gardner, Westminster & Fitchburg,	239,561 52	62,724 45	74,139 02	22,907 94	3,325 66	7,764 44	410,423 03
24 Hampshire,* 2	60,058 38	—	—	—	5,708 49	—	65,766 87
25 Hartford & Worcester,	258,523 33	—	—	—	804 46	—	259,327 79

26	Haverhill & Amesbury,	680,247 84	141,874 10	56,801 45	-	5,464 86	4,526 26	888,914 51
27	Haverhill & Plaistow,	67,925 26	-	-	-	10,545 11	-	78,470 37
28	Haverhill & Southern New Hampshire,	164,735 98	60,037 48	-	-	5,447 28	-	230,220 74
29	Holyoke,	1,028,599 15	377,483 61	425,197 15	21,000 00	16,100 29	14,288 19	1,882,668 39
30	Interstate Consolidated,	277,617 55	1,218 92	46,065 80	-	137,152 86	-	462,055 13
31	Lawrence & Methuen,	288,668 72	64,036 05	-	-	14,905 36	-	367,610 13
32	Lexington & Boston,	662,917 79	306,315 81	235,463 59	-	21,759 83	8,254 38	1,234,711 40
33	Linwood,	5,671 94	12,997 43	-	-	5,256 02	269 17	24,194 56
34	Lowell, Acton & Maynard,	48,917 38	-	-	-	1,162 47	4,854 51	54,934 36
35	Lowell & Fitchburg,	513,655 27	57,771 00	53,659 88	-	5,002 46	1,459 71	631,548 32
36	Lowell & Pelham,	55,292 74	41,801 05	-	-	1,402 81	-	98,496 60
37	Marlborough & Westborough,	216,179 00	63,543 69	84,698 62	15,648 71	4,684 65	1,220 57	385,975 24
38	Martha's Vineyard,	8,000 00	-	-	-	-	-	8,000 00
39	Medfield & Medway,	215,159 17	21,608 03	1,352 39	-	2,492 77	-	240,612 36
40	Milford, Attleborough & Woonsocket,	338 945 77	97,900 46	87,837 81	31,855 62	49,383 48	750 22	656,673 36
41	Milford & Uxbridge,	602,448 79	205,867 65	225,534 43	28,479 74	11,902 52	10,208 89	1,084,442 02
42	Mount Tom,	58,216 46	4,900 00	35,883 54	-	1,937 44	-	100,937 44
43	Nahant & Lynn,	167,403 66	46,460 24	24,095 91	-	1,891 16	4,000 00	243,850 97
44	Natick & Cohituate,	165,228 67	130,157 30	32,079 12	-	552 91	-	328,018 00
45	New Bedford & Onset,	{ 150,000 00 ³ 573,597 94	{ 113,717 85 547,794 50	199,881 59	59,239 23	16,862 79	1,334 42	{ 150,000 00 964,633 82
46	Newton,	1,007,421 36	547,794 50	273,297 32	-	50,781 81	5,093 73	1,884,388 72
47	Newton & Boston,	218,886 42	127,312 80	199,209 73	-	5,608 15	2,185 93	553,203 03
48	Newtonville & Watertown,	108,423 47	-	-	-	3,199 14	-	111,622 61
49	Norfolk & Bristol,	272,634 94	67,069 55	94,795 03	-	11,099 63	3,624 24	449,223 39
50	Northampton,	336,336 65	172,878 43	159,027 19	2,010 76	12,030 73	12,838 75	755,122 51

¹ Consolidated with the Holyoke July 31, 1907.
² Consolidated with the Holyoke June 30, 1907.
³ Property covered by a mortgage given by the Middleboro, Wareham & Buzzard's Bay, but not assumed by the New Bedford & Onset in the consolidation.

Tabulated Statements from Returns of Street Railway Companies—Continued.

RAILWAY COMPANIES.		ASSETS SEPTEMBER 30, 1907 — Concluded.						
		1. — Construc- tion.	2. — Equipment.	3. — Land and Buildings.	4. — Other Permanent Prop- erty.	5. — Cash and Current Assets.	6. — Miscel- laneous Assets.	7. — Gross Assets.
551	North End,	\$100,480 28	\$51,355 04	\$13,674 76	—	\$747 11	—	\$166,257 11
552	Norton & Taunton,	491,569 86	78,444 98	79,609 75	—	898 79	\$14,176 01	664,699 39
553	Norwood, Canton & Sharon,	130,990 87	23,930 92	8,453 95	—	2,750 67	596 16	166,722 57
554	Old Colony,	9,764,290 29	2,841,385 40	3,634,629 19	\$236,570 79	586,518 64	578,061 94	17,641,456 25
555	Pittsfield Electric,	391,372 36	103,484 56	177,388 74	—	5,259 73	—	677,505 39
556	Plymouth, Carver & Wareham, ¹	12,411 45	—	—	—	35,147 28	—	47,558 73
557	Plymouth & Sandwich,	51,989 82	9,227 17	4,974 64	—	2,173 99	—	68,365 62
558	Providence & Fall River,	253,202 04	97,085 70	31,831 36	—	7,826 85	3,464 72	393,410 67
559	Shelburne Falls & Colrain,	70,754 88	11,511 64	26,538 68	1,480 06	1,308 73	4,038 05	115,632 04
560	Somerville,	153,000 00	—	—	—	—	—	153,000 00
61	{Middlesex (receiver), Middlesex & Boston, ²	— 340,894 77	— 34,654 36	— 149,277 23	— —	— 205 71	— 3,303 57	— 528,335 64
62	Springfield,	2,131,076 65	711,179 56	1,141,828 47	—	233,031 24	149,116 48	4,366,232 40
63	Springfield & Eastern,	1,071,841 89	144,196 00	91,714 76	28,614 91	5,070 83	—	1,341,438 39
64	Taunton & Pawtucket,	195,843 64	83,646 50	54,161 09	—	3,594 67	5,587 09	342,832 99
65	Templeton,	391,768 98	—	—	—	8,030 08	—	399,799 06
66	Union,	852,155 44	305,512 77	595,154 75	—	27,494 79	62,240 72	1,842,558 47
67	Uxbridge & Blackstone,	202,592 12	27,737 85	16,590 67	—	9,100 27	1,426 77	257,447 68
68	Waltham,	192,316 60	9,667 36	—	—	8,031 75	—	210,015 71
69	Ware & Brookfield,	148,878 99	32,364 04	51,750 00	—	1,073 75	4,459 75	238,526 53
70	Warren, Brookfield & Spencer,	258,163 73	40,726 32	66,089 22	—	15,133 03	1,353 87	381,466 17
71	{Webster & Dudley, Webster & Dudley and Worcester & Webster (lessee), ³	115,733 74 — —	12,968 91 — —	8,072 86 — —	— — 60 00	— — 2,048 18	— — —	136,775 51 — 87,306 31
72	Westborough & Hopkinton,	84,915 45	82 68	200 00	60 00	2,048 18	—	87,306 31

73	West End,	.	.	.	11,698,914 88	8,882,340 03	11,556,881 52	283,005 31	13,981 08	1,207,201 98	33,642,324 80
74	Western Massachusetts,	.	.	.	721,482 89	136,203 96	105,281 55	20,316 30	38,746 81	571 78	1,022,603 29
75	Winnisimmet,	.	.	.	50,000 00	-	-	-	74 85	50_00	50,124 85
76	Worcester & Blackstone Valley,	.	.	.	268,442 30	85,427 41	129,610 27	9,262 73	32,150 52	1,880 53	526,773 76
77	Worcester Consolidated,	.	.	.	3,924,307 20	1,621,412 47	1,443,038 62	44,124 55	181,148 77	186,831 38	7,400,862 99
78	Worcester & Holden,	.	.	.	236,811 20	49,021 53	61,792 19	-	3,087 75	6,014 33	356,727 00
79	Worcester & Northern, ¹	.	.	.	11,500 00	-	3,500 00	-	-	-	15,000 00
80	Worcester & Providence, ¹	.	.	.	22,454 67	-	-	-	25 33	-	22,480 00
81	Worcester & Shrewsbury R.R.,	.	.	.	70,803 58	52,710 86	-	-	3 85	-	123,518 29
82	Worcester & Shrewsbury Street Ry.,	.	.	.	11,700 00	8,300 00	-	-	22 05	-	20,022 05
83	Worcester & Southbridge,	.	.	.	874,081 47	233,864 52	388,124 71	8,437_06	56,966 25	12,240 19	1,573,714 20
84	Worcester & Webster,	.	.	.	257,596 11	89,092 04	134,341 77	-	23,996 21	-	505,026 13
85	Woronoco,* ⁴	.	.	.	222,539 79	88,806 60	74,901 47	17,655 50	14,203 62	2,504 09	420,611 07
	Totals, ⁵	.	.	.	\$79,993,549 72	\$28,738,946 07	\$36,941,286 12	\$1,807,999_62	\$5,855,411 69	\$7,960,720 27	\$161,297,913 49

¹ Obtained a certificate of incorporation, but has not commenced the construction of its railway.

² Purchaser of the South Middlesex at receiver's sale.

³ The Consolidated Railway Company of Connecticut.

⁴ Consolidated with the Western Massachusetts April 30, 1907.

⁵ Not including the companies marked *, these companies having been consolidated during the year.

Tabulated Statements from Returns of Street Railway Companies — Continued.

RAILWAY COMPANIES.		LIABILITIES SEPTEMBER 30, 1907.						
		8. — Capital Stock.	9. — Funded Debt.	10. — Real Estate Mortgages.	11. — Current Liabilities.	12. — Accrued Liabilities.	13. — Sinking and other Special Funds.	14. — Gross Liabilities.
1	Amesbury & Hampton,	\$100,000 00	\$100,000 00	—	\$79,275 00	—	\$4,004 58	\$283,279 58
2	Amherst & Sunderland,* ¹	120,000 00	117,000 00	—	18,915 16	\$1,366 20	—	257,281 36
3	Athol & Orange,	74,500 00	60,000 00	—	—	750 00	3,000 00	138,250 00
4	Berkshire,	1,648,100 00	1,400,000 00	—	321,111 14	29,276 84	8,793 45	3,407,281 43
5	Blue Hill,	300,000 00	250,000 00	—	190,592 80	—	291 74	740,884 54
6	Boston & Chelsea,	121,000 00	—	—	—	—	—	121,000 00
7	Boston Elevated,	13,300,000 00	8,500,000 00	—	1,241,551 87	2,556,972 14	2,094,312 61	27,692,836 62
8	Boston & Northern,	11,043,200 00	10,332,500 00	—	3,200,010 53	384,714 67	58,102 13	25,018,527 33
9	Boston & Revere Electric,	50,000 00	14,500 00	—	35,500 00	—	—	100,000 00
10	Boston & Worcester,	1,725,000 00	1,716,000 00	—	1,105,658 29	54,374 55	—	4,601,032 84
11	Bristol & Norfolk,	100,000 00	70,000 00	—	462 66	47 88	—	170,510 54
12	Brockton & Plymouth,	295,000 00	295,000 00	—	141,610 98	6,572 60	658 24	738,841 82
13	Citizens' Electric,	240,000 00	223,000 00	—	59,206 70	10,280 25	5,000 00	537,486 95
14	Connecticut Valley,	500,000 00	500,000 00	\$2,800 00	168,615 61	—	—	1,171,415 61
15	Concord, Maynard & Hudson,	175,000 00	165,000 00	—	93,156 57	2,062 50	—	435,219 07
16	Conway Electric,	100,000 00	35,000 00	10,000 00	56,872 33	962 47	—	202,834 80
17	Cottage City & Edgartown Traction,	60,000 00	—	—	2,700 00	—	—	62,700 00
18	Dartmouth & Westport,	262,500 00	90,000 00	—	7,004 07	10,877 24	37,007 83	407,389 14
19	Dedham & Franklin,	75,000 00	100,000 00	—	11,220 33	3,452 28	—	189,672 61
20	East Middlesex,	297,700 00	220,000 00	—	20 00	—	—	517,720 00
21	East Taunton,	110,000 00	45,000 00	—	1,326 63	2,313 50	—	158,640 13
22	Fitchburg & Leominster,	450,000 00	400,000 00	—	566,822 88	3,559 45	—	1,420,382 33
23	Gardner, Westminster & Fitchburg,	185,000 00	185,000 00	—	18,541 90	1,541 66	—	390,083 56
24	Hampshire,* ²	60,000 00	—	—	—	—	—	60,000 00
25	Hartford & Worcester,	158,000 00	—	—	100,526 69	—	—	258,526 69

26	Haverhill & Amesbury,	150,000 00	490,000 00	317,127 57	11,077 91	-	968,205 48
27	Haverhill & Plaistow,	30,000 00	30,000 00	3,375 00	-	-	63,375 00
28	Haverhill & Southern New Hampshire,	80,000 00	80,000 00	68,737 50	-	-	228,737 50
29	Holyoke,	980,000 00	717,000 00	75,861 68	39,989 88	-	1,812,851 56
30	Interstate Consolidated,	275,000 00	-	129,631 43	-	-	404,631 43
31	Lawrence & Methuen,	150,000 00	125,000 00	82,001 25	-	-	357,001 25
32	Lexington & Boston,	525,000 00	500,000 00	205,226 65	1,252 07	-	1,231,478 72
33	Linwood,	12,000 00	-	4,866 76	308 90	-	17,175 66
34	Lowell, Acton & Maynard,	20,000 00	-	34,077 19	-	-	54,077 19
35	Lowell & Fitchburg,	275,000 00	275,000 00	81,684 74	4,287 94	-	635,972 68
36	Lowell & Pelham,	40,000 00	40,000 00	31,575 00	-	-	111,575 00
37	Marlborough & Westborough,	160,000 00	160,000 00	85,909 78	9,035 62	-	414,945 40
38	Martha's Vineyard,	8,000 00	-	-	-	-	8,000 00
39	Medfield & Medway,	100,000 00	100,000 00	44,348 35	8,782 97	-	253,131 32
40	Milford, Attleborough & Woonsocket,	315,000 00	250,000 00	38,855 11	1,773 80	2,249 34	607,878 25
41	Milford & Uxbridge,	440,000 00	415,000 00	196,568 22	6,329 97	3,067 68	1,060,965 87
42	Mount Tom,	100,000 00	-	-	-	-	100,000 00
43	Nahant & Lynn,	100,000 00	75,000 00	36,383 30	2,887 17	-	214,270 47
44	Natick & Cohituate,	100,000 00	-	213,843 90	279 75	-	314,123 65
45	New Bedford & Onset,	550,000 00	{ 150,000 00 ³	46,753 78	8,638 30	29,307 98	{ 3 150,000 00
			{ 280,000 00 }				{ 914,700 06
46	Newton,	722,000 00	575,000 00	515,854 09	8,569 73	7,500 00	1,831,523 82
47	Newton & Boston,	200,000 00	200,000 00	392,193 19	3,291 60	-	795,484 79
48	Newtonville & Watertown,	50,000 00	-	59,650 00	-	-	109,650 00
49	Norfolk & Bristol,	200,000 00	-	271,449 17	39,049 10	-	510,498 27
50	Northampton,	300,000 00	225,000 00	215,000 00	-	-	740,000 00

¹ Consolidated with the Holyoke July 31, 1907.

² Consolidated with the Holyoke June 30, 1907.

³ Middleboro, Wareham & Buzzard's Bay mortgage bonds. This company issued bonds, went into bankruptcy, property bought by New Bedford & Onset subject to but without assuming any indebtedness.

Tabulated Statements from Returns of Street Railway Companies — Continued.

RAILWAY COMPANIES.		LIABILITIES SEPTEMBER 30, 1907 — Concluded.						
		8. — Capital Stock.	9. — Funded Debt.	10. — Real Estate Mortgages.	11. — Current Liabilities.	12. — Accrued Liabilities.	13. — Sinking and other Special Funds.	14. — Gross Liabilities.
51	North End,	\$110,000 00	\$75,000 00	—	—	—	—	\$185,000 00
52	Norton & Taunton,	297,000 00	296,000 00	—	\$111,569 67	—	—	704,569 67
53	Norwood, Canton & Sharon,	62,500 00	—	—	165,524 72	\$105 70	—	228,130 42
54	Old Colony,	7,712,200 00	7,501,500 00	—	2,092,926 21	206,100 66	\$48,772 13	17,561,499 00
55	Pittsfield Electric,	300,000 00	300,000 00	—	2,500 00	7,031 52	12,608 06	622,139 58
56	Plymouth, Carver & Wareham, ¹	45,000 00	—	—	—	—	2,558 73	47,558 73
57	Plymouth & Sandwich,	36,800 00	—	—	24,586 33	—	—	61,386 33
58	Providence & Fall River,	165,000 00	165,000 00	—	80,332 25	4,017 79	—	414,350 04
59	Shelburne Falls & Colrain,	50,000 00	50,000 00	—	2,772 76	527 46	—	103,300 22
60	Somerville,	153,000 00	—	—	—	—	—	153,000 00
61	South Middlesex (receiver),	—	—	—	—	—	—	—
62	Middlesex & Boston, ²	300,000 00	100,000 00	—	126,603 61	1,116 23	—	527,719 84
63	Springfield,	2,258,100 00	1,500,000 00	—	168,014 37	40,976 96	31,611 03	3,998,702 36
64	Springfield & Eastern,	900,000 00	330,000 00	—	93,524 87	3,337 37	—	1,326,862 24
65	Taunton & Pawtucket,	100,000 00	200,000 00	—	47,787 21	3,193 30	—	350,980 51
66	Templeton,	75,000 00	—	—	394,470 05	—	—	469,470 05
67	Union,	900,000 00	400,000 00	—	295,784 25	32,923 61	4,245 05	1,632,952 91
68	Uxbridge & Blackstone,	120,000 00	80,000 00	—	45,403 35	1,439 26	367 01	247,209 62
69	Waltham,	100,000 00	100,000 00	—	8,500 00	1,670 16	—	210,170 16
70	Ware & Brookfield,	100,000 00	135,000 00	—	15,783 87	—	—	250,783 87
71	Warren, Brookfield & Spencer,	150,000 00	125,000 00	—	51,705 80	3,891 05	17,286 26	347,883 11
72	Webster & Dudley,	50,000 00	30,000 00	—	1,450 00	78,185 59	—	159,635 59
73	Webster & Dudley and Worcester & Webster (lessee), ³	—	—	—	—	—	—	—
74	Westborough & Hopkinton,	40,000 00	40,000 00	—	10,100 41	835 03	—	90,935 44

73	West End,	.	.	.	16,509,250 00	15,967,000 00	-	15,981 42	-	8,802 14	4,016 71	-	32,492,231 42
74	Western Massachusetts,	.	.	.	550,000 00	275,000 00	-	160,186 27	-	-	-	-	998,005 12
75	Winnisimmet,	.	.	.	50,000 00	-	-	-	-	-	-	-	50,000 00
76	Worcester & Blackstone Valley,	.	.	.	200,000 00	200,000 00	-	60,640 84	3,233 10	3,233 10	5,092 53	-	468,966 47
77	Worcester Consolidated,	.	.	.	3,550,000 00	1,060,000 00	\$69,500 00	2,415,113 95	93,656 87	93,656 87	-	-	7,188,270 82
78	Worcester & Holden,	.	.	.	150,000 00	150,000 00	-	49,661 32	-	-	-	-	349,661 32
79	Worcester & Northern, ¹	.	.	.	15,000 00	-	-	-	-	-	-	-	15,000 00
80	Worcester & Providence, ¹	.	.	.	22,480 00	-	-	-	-	-	-	-	22,480 00
81	Worcester & Shrewsbury R.R.,	.	.	.	36,825 00	22,000 00	-	-	-	-	-	-	58,825 00
82	Worcester & Shrewsbury Street Ry.,	.	.	.	20,000 00	-	-	-	-	-	-	-	20,000 00
83	Worcester & Southbridge,	.	.	.	750,000 00	700,000 00	-	172,271 83	17,883 43	17,883 43	10,954 43	-	1,651,109 69
84	Worcester & Webster,	.	.	.	150,000 00	150,000 00	-	-	255,152 50	255,152 50	22,546 21	-	577,698 71
85	Woronoco,* ⁴	.	.	.	250,000 00	75,000 00	-	78,762 85	4,881 36	4,881 36	1,429 16	-	410,073 37
	Totals, ⁵	.	.	.	\$73,280,155 00	\$59,339,500 00	\$84,800 00	\$17,166,056 00	\$3,977,392 47	\$3,977,392 47	\$2,413,353 73	-	\$156,261,257 20

¹ Obtained a certificate of incorporation, but has not commenced the construction of its railway.

² Purchaser of the South Middlesex at receiver's sale.

³ The Consolidated Railway Company of Connecticut.

⁴ Consolidated with the Western Massachusetts April 30, 1907.

⁵ Not including the companies marked *, these companies having been consolidated during the year.

Tabulated Statements from Returns of Street Railway Companies — Continued.

RAILWAY COMPANIES.		PROPERTY ACCOUNTS: ADDITIONS AND DEDUCTIONS DURING THE YEAR.						
		15. — Additions to Railway.	16. — To Equip- ment.	17. — To Land and Buildings.	18. — To other Perma- nent Property.	19. — Total Ad- ditions.	20. — Deduc- tions.	21. — Net Addi- tions.
1	Amesbury & Hampton,	\$81 45	\$15 00	—	—	\$96 45	\$706 00	\$609 55 <i>d</i>
2	Amherst & Sunderland,	157 26	512 94	—	—	670 20	—	670 20
3	Athol & Orange,	—	—	\$548 22	—	548 22	—	548 22
4	Berkshire,	44,300 41	74,066 31	7,102 53	—	125,469 25	—	125,469 25
5	Blue Hill,	297 31	—	—	—	297 31	—	297 31
6	Boston & Chelsea,	—	—	—	—	—	—	—
7	Boston Elevated,	1,707,256 18	447,560 92	1,604,164 13	\$90,297 55	3,849,278 78	—	3,849,278 78
8	Boston & Northern,	343,371 48	526,209 25	245,512 06	167 02	1,115,259 81	117,936 64	997,323 17
9	Boston & Revere Electric,	—	—	—	—	—	—	—
10	Boston & Worcester,	329,082 37	43,897 54	39,622 03	—	412,601 94	—	412,601 94
11	Bristol & Norfolk,	62 00	1 95	5 41	80 17	149 53	—	149 53
12	Brockton & Plymouth,	411 42	1,091 22	—	2,241 15	3,743 79	—	3,743 79
13	Citizens' Electric,	8,214 85	—	25,524 30	—	33,739 15	656 98	33,082 17
14	Connecticut Valley,	3,003 18	15,542 31	2,106 53	358 48	21,010 50	1,578 75	19,431 75
15	Concord, Maynard & Hudson,	3,961 28	5,438 42	122 16	—	9,521 86	—	9,521 86
16	Conway Electric,	28 40	30 00	—	15,000 00	15,058 40	298 42	14,759 98
17	Cottage City & Edgartown Traction,	—	—	—	—	—	500 00	500 00 <i>d</i>
18	Dartmouth & Westport,	1,428 78	22,653 48	21,186 66	—	45,268 92	5,678 86	39,590 06
19	Dedham & Franklin,	—	—	—	—	—	231 00	231 00 <i>d</i>
20	East Middlesex,	—	—	—	—	—	—	—
21	East Taunton,	—	1,799 55	—	—	1,799 55	467 50	1,332 05
22	Fitchburg & Leominster,	8,480 90	33,299 67	45,391 03	586 46	87,758 06	11,681 82	76,076 24
23	Gardner, Westminster & Fitchburg,	1,500 00	2,894 44	75 00	—	4,469 44	—	4,469 44
24	Hampshire,	—	—	—	—	—	—	—
25	Hartford & Worcester,	95,809 93	—	4,137 80	—	99,747 73	—	99,747 73

26	Haverhill & Amesbury,	2,640 00	-	-	-	2,640 00	-	-	-	2,640 00
27	Haverhill & Plaistow,	-	-	-	-	-	-	-	-	-
28	Haverhill & Southern New Hampshire,	-	177 40	-	-	177 40	-	-	-	177 40
29	Holyoke,	243,427 86	87,348 81	-	51,039 72	381,816 39	-	-	19,719 25	362,097 14
30	Interstate Consolidated,	-	-	-	-	-	-	-	-	-
31	Lawrence & Methuen,	26 57	-	-	-	26 57	-	-	-	26 57
32	Lexington & Boston,	1,277 94	542 20	-	169 96	1,990 10	-	-	-	1,990 10
33	Linwood,	-	-	-	-	-	-	-	1,444 16	1,444 16d
34	Lowell, Acton & Maynard,	488 38	-	-	-	488 38	-	-	-	488 38
35	Lowell & Fitchburg,	69,636 87	9,893 44	-	3,033 41	82,563 72	-	-	-	82,563 72
36	Lowell & Pelham,	-	-	-	-	-	-	-	-	-
37	Marlborough & Westborough,	766 06	16 00	-	-	782 06	-	-	-	782 06
38	Martha's Vineyard,	-	-	-	-	-	-	-	-	-
39	Medfield & Medway,	-	125 00	-	-	125 00	-	-	379 50	254 50d
40	Milford, Attleborough & Woonsocket,	1,286 02	6,500 00	-	500 00	8,726 78	-	-	-	8,726 78
41	Milford & Uxbridge,	-	-	-	100 00	100 00	-	-	17 50	82 50
42	Mount Tom,	-	-	-	-	-	-	-	-	-
43	Nahant & Lynn,	1,138 03	1,305 06	-	1,380 36	5,546 50	-	1,723 05	1,606 90	3,939 60
44	Natick & Cohituate,	4,304 94	3,380 39	-	-	7,685 33	-	-	280 00	7,405 33
45	New Bedford & Onset,	1,529 53	6,663 99	-	2,900 10	11,600 95	-	507 33	1,695 00	9,905 95
46	Newton,	12,523 47	5,619 56	-	598 95	18,741 98	-	-	23 00	18,718 98
47	Newton & Boston,	3,003 15	191 02	-	1,034 30	4,228 47	-	-	75 00	4,153 47
48	Newtonville & Watertown,	-	-	-	-	-	-	-	-	-
49	Norfolk & Bristol,	-	-	-	6,416 27	6,416 27	-	-	-	6,416 27
50	Northampton,	2,798 59	110 00	-	-	2,908 59	-	-	-	2,908 59

d Net deduction.

Tabulated Statements from Returns of Street Railway Companies — Continued.

RAILWAY COMPANIES.		PROPERTY ACCOUNTS: ADDITIONS AND DEDUCTIONS DURING THE YEAR—Concluded.						
		15.—Additions to Railway.	16.—To Equip- ment.	17.—To Land and Buildings.	18.—To other Perma- nent Property.	19.—Total Ad- ditions.	20.—Deduc- tions.	21.—Net Addi- tions.
51	North End,	—	—	—	—	—	—	—
52	Norton & Taunton,	\$10,206 03	\$4,458 65	\$55 81	—	\$14,720 49	—	\$14,720 49
53	Norwood, Canton & Sharon,	528 83	13 40	—	—	542 23	—	542 23
54	Old Colony,	400,815 77	198,461 86	163,754 39	\$165 63	763,197 65	\$362,546 79	400,650 86
55	Pittsfield Electric,	8,941 05	5,850 00	80,586 18	—	95,377 23	—	95,377 23
56	Plymouth, Carver & Wareham,	118 08	—	—	—	118 08	—	118 08
57	Plymouth & Sandwich,	—	—	—	—	—	—	—
58	Providence & Fall River,	661 90	187 28	—	—	849 18	—	849 18
59	Shelburne Falls & Colrain,	—	825 00	—	557 00	1,382 00	—	1,382 00
60	Somerville,	—	—	—	—	—	—	—
61	{South Middlesex (receiver), Middlesex & Boston,	—	—	—	—	—	—	—
62	Springfield,	62,051 30	49,235 32	14,113 61	—	125,400 23	1,038 85	124,361 38
63	Springfield & Eastern,	424,132 05	25,058 57	157 63	—	449,348 25	—	449,348 25
64	Taunton & Pawtucket,	2,389 67	27,600 00	—	—	29,989 67	17,660 00	12,329 67
65	Templeton,	—	—	—	—	—	—	—
66	Union,	57,375 17	38,222 10	91,229 28	—	186,826 55	2,350 00	184,476 55
67	Uxbridge & Blackstone,	102 74	—	—	—	102 74	—	102 74
68	Waltham,	—	—	—	—	—	1,350 00	1,350 00d
69	Ware & Brookfield,	—	46 04	—	—	46 04	—	46 04
70	Warren, Brookfield & Spencer,	982 94	—	—	—	982 94	—	982 94
71	Webster & Dudley,	1,450 00	—	—	—	1,450 00	22,726 67	21,276 67d
72	{Webster & Dudley and Worcester & Webster (lessee), Westborough & Hopkinton,	—	—	—	—	—	—	—

73	West End, . . . . .	.	.	.	.	319,374 31	507,338 38	181,105 39	12,855 93	1,020,674 01	252,819 69	767,854 32
74	Western Massachusetts, . . . . .	.	.	.	.	231,552 17	88,806 60	75,639 99	18,022 28	. 414,021 04	75,224 69	338,796 35
75	Winnisimmet, . . . . .	.	.	.	.	-	-	-	-	-	-	-
76	Worcester & Blackstone Valley, . . . . .	.	.	.	.	33 79	-	-	1,184 49	1,218 28	564 51	653 77
77	Worcester Consolidated, . . . . .	.	.	.	.	59,128 53	105,487 89	53,034 48	71 66	217,722 56	2,365 00	215,357 56
78	Worcester & Holden, . . . . .	.	.	.	.	4,180 07	766 60	1,339 89	-	6,286 56	-	6,286 56
79	Worcester & Northern, . . . . .	.	.	.	.	-	-	-	-	-	-	-
80	Worcester & Providence, . . . . .	.	.	.	.	-	-	-	-	-	-	-
81	Worcester & Shrewsbury R.R., . . . . .	.	.	.	.	-	-	-	-	-	-	-
82	Worcester & Shrewsbury Street Ry., . . . . .	.	.	.	.	-	-	-	-	-	-	-
83	Worcester & Southbridge, . . . . .	.	.	.	.	3,007 94	32,080 97	47,776 46	-	82,865 37	-	82,865 37
84	Worcester & Webster, . . . . .	.	.	.	.	-	-	-	-	-	33,784 97	33,784 97d
85	Woronoco, . . . . .	.	.	.	.	221 97	-	600 00	-	821 97	-	821 97

d Net deduction.

Tabulated Statements from Returns of Street Railway Companies — Continued.

RAILWAY COMPANIES.		INCOME FOR THE YEAR ENDING SEPTEMBER 30, 1907.						
		22. — From Pas- sengers.	23. — From Mails and Merchandise.	24. — From Tolls, Rents, Ad- vertising, etc.	25. — Total Earnings from Operation.	26. — Rentals from Lease of Railway.	27. — Miscel- laneous Income.	28. — Gross Income.
1	Amesbury & Hampton,	\$24,861 31	\$772 23	\$553 70	\$26,187 24	—	—	\$26,187 24
2	Amherst & Sunderland, ¹	27,070 25	2,241 08	342 24	29,653 57	—	\$59 49	29,713 06
3	Athol & Orange,	45,500 70	—	—	45,673 65	—	—	45,673 65
4	Berkshire,	398,915 74	2,287 01	3,935 05	405,137 80	—	4,148 27	409,286 07
5	Blue Hill,	84,193 20	198 00	275 04	84,666 24	—	561 24	85,227 48
6	Boston & Chelsea, ²	—	—	—	—	\$7,260 00	300 00	7,560 00
7	Boston Elevated,	13,546,779 20	38,898 15	367,288 65	13,952,966 00	—	58,201 72	14,011,167 72
8	Boston & Northern,	4,575,825 84	1,592 24	41,574 19	4,618,992 27	—	11,313 79	4,630,306 06
9	Boston & Revere Electric, ³	—	—	—	—	2,500 00	—	2,500 00
10	Boston & Worcester,	517,370 23	478 24	5,793 85	523,642 32	—	—	523,642 32
11	Bristol & Norfolk,	11,906 55	60 00	306 15	12,272 70	—	—	12,272 70
12	Brockton & Plymouth,	112,265 28	1,959 94	546 33	114,771 55	—	6,977 26	121,748 81
13	Citizens' Electric,	104,324 61	853 35	1,214 56	106,392 52	—	—	106,392 52
14	Connecticut Valley,	170,856 22	8,324 98	829 01	180,010 21	—	—	180,010 21
15	Concord, Maynard & Hudson,	57,150 38	479 44	2,352 10	59,981 92	—	—	59,981 92
16	Conway Electric,	2,938 44	10,147 61	775 72	13,861 77	—	—	13,861 77
17	Cottage City & Edgartown Traction,	5,233 45	—	—	5,233 45	—	—	5,233 45
18	Dartmouth & Westport,	178,634 37	28,061 31	2,885 33	209,581 01	—	—	209,581 01
19	Dedham & Franklin,	22,800 62	200 00	247 30	23,247 92	—	—	23,247 92
20	East Middlesex, ³	—	—	—	—	30,000 00	49 76	30,049 76
21	East Taunton,	40,218 95	—	100 02	40,318 97	—	—	40,318 97
22	Fitchburg & Leominster,	259,456 46	250 00	732 00	260,468 46	—	28,702 38	289,170 84
23	Gardner, Westminster & Fitchburg,	61,757 30	594 45	2,549 05	64,900 80	—	260 00	65,160 80
24	Hampshire, ⁴	—	—	—	—	3,000 00	206 33	3,206 33
25	Hartford & Worcester, ⁵	—	—	—	—	821 66	—	821 66

26	Haverhill & Amesbury,	119,992 49	608 47	1,221 82	121,822 78	-	-	121,822 78
27	Haverhill & Plaistow,	19,740 97	-	341 75	20,082 72	-	-	20,082 72
28	Haverhill & Southern New Hampshire,	46,484 82	250 00	190 60	46,925 42	-	-	46,925 42
29	Holyoke,	432,813 98	3,932 07	4,911 42	441,657 47	-	39,121 36	480,778 83
30	Interstate Consolidated,	173,243 95	707 16	540 04	174,491 15	-	-	174,491 15
31	Lawrence & Methuen,	79,161 74	-	311 00	79,472 74	-	-	79,472 74
32	Lexington & Boston,	137,641 86	-	13,492 92	151,134 78	-	-	151,134 78
33	Linwood,	13,593 31	-	136 00	13,729 31	-	-	13,729 31
34	Lowell, Acton & Maynard,	6,606 60	-	366 79	6,973 39	-	-	6,973 39
35	Lowell & Fitchburg,	38,175 89	-	549 57	38,725 46	-	-	38,725 46
36	Lowell & Pelham,	11,636 06	-	40 88	11,676 94	-	-	11,676 94
37	Marlborough & Westborough,	28,137 75	-	2,115 52	30,253 27	-	1,000 00	31,253 27
38	Martha's Vineyard, ⁶	-	-	-	-	280 00	-	280 00
39	Medfield & Medway,	22,179 44	-	115 00	22,294 44	-	-	22,294 44
40	Millford, Attleborough & Woonsocket,	92,803 76	606 92	5,942 32	99,353 00	-	6,117 45	105,470 45
41	Millford & Uxbridge,	177,616 78	512 20	742 48	178,871 46	-	-	178,871 46
42	Mount Tom, ⁷	-	-	-	-	6,000 00	92 26	6,092 26
43	Nahant & Lynn,	46,225 52	-	1,100 00	47,325 52	-	-	47,325 52
44	Natick & Cohituate,	98,264 31	250 00	1,563 74	100,078 05	-	-	100,078 05
45	New Bedford & Onset,	98,191 57	10,209 52	9,486 67	117,887 76	-	-	117,887 76
46	Newton,	351,906 00	-	5,682 62	357,588 62	-	-	357,588 62
47	Newton & Boston,	72,422 24	243 93	1,338 84	74,005 01	-	-	74,005 01
48	Newtonville & Watertown, ⁸	-	-	-	-	-	-	8,137 75
49	Norfolk & Bristol,	68,478 85	248 50	301 36	69,028 71	8,137 75	-	69,028 71
50	Northampton,	170,259 88	2,063 78	2,163 72	174,487 38	-	-	174,487 38

¹ Operations to July 31, 1907, when consolidated with the Holyoke.

² Leased to the Boston Elevated and released to and operated by the Boston & Northern.

³ Leased to and operated by the Boston & Northern.

⁴ Operations to June 30, 1907, when consolidated with the Holyoke.

⁵ Operated by the Worcester & Southbridge under an operating contract.

⁶ Operated by the Cottage City & Edgartown Traction.

⁷ Leased to and operated by the Holyoke.

⁸ Tracks used by the Boston Elevated and the Newton & Boston.

Tabulated Statements from Returns of Street Railway Companies — Continued.

RAILWAY COMPANIES.		INCOME FOR THE YEAR ENDING SEPTEMBER 30, 1907 — Concluded.						
		22. — From Pas- sengers.	23. — From Mails and Merchandise.	24. — From Tolls, Rents, Ad- vertising, etc.	25. — Total Earnings from Operation.	26. — Rentals from Lease of Railway.	27. — Miscel- laneous Income.	28. — Gross Income.
51	North End, ¹	—	—	—	—	\$8,000 00	\$12 15	\$8,012 15
52	Norton & Taunton,	\$55,986 59	\$855 12	\$262 26	\$57,103 97	—	—	57,103 97
53	Norwood, Canton & Sharon,	10,296 65	—	886 34	11,182 99	—	—	11,182 99
54	Old Colony,	2,687,744 73	36,334 52	57,875 80	2,781,955 05	—	124,708 38	2,906,663 43
55	Pittsfield Electric,	200,298 57	1,278 07	1,848 43	203,425 07	—	105 00	203,530 07
56	Plymouth, Carver & Wareham,	—	—	—	—	—	—	—
57	Plymouth & Sandwich,	8,414 48	—	2 80	8,417 28	—	—	8,417 28
58	Providence & Fall River,	47,211 66	11,605 85	2,898 77	61,716 28	—	—	61,716 28
59	Shelburne Falls & Colrain,	9,313 63	9,502 13	2,104 83	20,920 59	—	—	20,920 59
60	Somerville, ²	—	—	—	—	9,180 00	—	9,180 00
61	South Middlesex (receiver), ³	75,833 34	166 67	705 26	76,705 27	—	—	76,705 27
62	Middlesex & Boston, ⁴	13,080 25	33 33	57 26	13,170 84	—	—	13,170 84
63	Springfield,	1,278,721 11	7,659 26	16,665 01	1,303,045 38	—	3,683 44	1,306,728 82
64	Springfield & Eastern, ⁵	—	—	—	—	31,500 00	—	31,500 00
65	Taunton & Pawtucket,	51,631 27	—	1,293 48	52,924 75	—	—	52,924 75
66	Templeton,	39,571 95	3,138 52	1,554 43	44,264 90	—	—	44,264 90
67	Union,	427,300 11	913 81	39,639 04	467,852 96	—	—	467,852 96
68	Uxbridge & Blackstone,	29,583 40	—	108 33	29,691 73	—	—	29,691 73
69	Waltham, ⁶	—	—	5,460 00	5,460 00	—	—	5,460 00
70	Ware & Brookfield,	24,109 58	324 68	120 00	24,554 26	—	—	24,554 26
71	Warren, Brookfield & Spencer,	60,987 66	—	333 96	61,321 62	—	—	61,321 62
72	Webster & Dudley, ⁷	—	—	—	—	14,500 00	—	14,500 00
73	Webster & Dudley and Worcester & Webster (lessee), ⁸	32,280 01	92 21	550 28	32,922 50	—	51 89	32,974 39
74	Westborough & Hopkinton,	13,369 60	497 28	50 58	13,917 46	—	—	13,917 46

73	West End, ²	.	.	.	.	1,213,447 50	69 20	1,213,516 70
74	Western Massachusetts,	.	.	.	.	—	3,798 30	92,036 23
75	Winnisimmet, ³	.	.	.	.	3,000 00	—	3,000 00
76	Worcester & Blackstone Valley,	.	.	.	.	—	—	85,347 80
77	Worcester Consolidated,	.	.	.	.	1,294 45	—	1,641,264 88
78	Worcester & Holden,	.	.	.	.	22,220 70	—	43,722 48
79	Worcester & Northern,	.	.	.	.	246 22	—	—
80	Worcester & Providence,	.	.	.	.	—	—	—
81	Worcester & Shrewsbury R.R., ¹	.	.	.	.	2,650 00	1,100 00	3,750 00
82	Worcester & Shrewsbury Street Ry., ¹	.	.	.	.	1,000 00	—	1,000 00
83	Worcester & Southbridge,	.	.	.	.	—	2,695 45	229,018 96
84	Worcester & Webster, ¹⁰	.	.	.	.	10,500 00	—	10,500 00
85	Woronoco, ¹¹	.	.	.	.	—	137 40	46,724 09
	Totals,	.	.	.	.	\$1,351,776 91	\$293,472 52	\$32,203,111 37

¹ Leased to and operated by the Worcester Consolidated.

² Leased to and operated by the Boston Elevated.

³ Operations to August 15, 1907.

⁴ Operations from August 15, 1907.

⁵ Leased to and operated by the Springfield.

⁶ Operated by the Newton under an agreement.

⁷ Leased to and operated by the Consolidated Railway of Connecticut until April 1, 1907, when lease was transferred to the Worcester & Southbridge and since operated by that company.

⁸ Operations to April 1, 1907, when lease was transferred to the Worcester & Southbridge.

⁹ Leased to and operated by the Boston & Northern.

¹⁰ Leased to the Webster & Dudley and operated by the Consolidated Railway of Connecticut until April 1, 1907, when lease was transferred to the Worcester & Southbridge and since operated by that company.

¹¹ Operations to April 30, 1907, when consolidated with the Western Massachusetts,

Tabulated Statements from Returns of Street Railway Companies — Continued.

OPERATING EXPENSES FOR THE YEAR ENDING SEPTEMBER 30, 1907.									
RAILWAY COMPANIES.		29. — Salaries of Officers and Clerks.	30. — Office Expenses and Supplies.	31. — Legal Expenses.	32. — Insur- ance.	33. — Other General Expenses.	34. — Repair of Roadbed and Track.	35. — Repair of Electric Line Construction.	
1	Amesbury & Hampton,	\$1,213 90	\$313 40	\$109 54	\$418 46	\$811 78	\$3,501 82	\$768 18	
2	Amherst & Sunderland,	1,984 06	391 63	25 00	376 57	—	5,957 58	546 87	
3	Athol & Orange,	2,100 00	553 63	—	548 55	5,697 70	2,935 77	549 92	
4	Berkshire,	13,442 30	2,428 71	2,010 39	4,219 12	3,846 18	36,053 56	9,254 50	
5	Blue Hill,	5,074 54	470 27	209 87	1,395 51	1,978 17	1,627 92	1,085 30	
6	Boston & Chelsea,	—	—	—	—	—	—	—	
7	Boston Elevated,	242,882 82	70,637 03	351,339 10	113,835 30	205,302 24	719,237 20	209,844 40	
8	Boston & Northern,	95,128 80	20,790 46	22,012 65	39,038 59	62,557 22	159,317 47	65,250 97	
9	Boston & Revere Electric,	—	—	—	—	—	—	—	
10	Boston & Worcester,	16,035 25	3,788 44	—	8,422 60	8,322 61	8,864 88	3,413 36	
11	Bristol & Norfolk,	1,092 00	315 31	—	184 95	—	248 54	35 53	
12	Brookton & Plymouth,	10,244 18	704 46	1,591 64	2,428 26	2,273 21	4,226 09	1,215 75	
13	Citizens' Electric,	3,585 65	465 50	—	2,040 00	2,633 36	3,257 09	1,140 29	
14	Connecticut Valley,	5,549 84	3,115 25	1,784 39	4,007 59	828 27	7,332 74	2,136 58	
15	Concord, Maynard & Hudson,	2,073 43	74 07	242 25	1,440 00	609 41	956 37	737 44	
16	Conway Electric,	414 31	618 53	—	—	—	296 67	—	
17	Cottage City & Edgartown Traction,	—	32 10	—	—	—	624 22	390 00	
18	Dartmouth & Westport,	4,570 80	61 75	—	1,552 01	1,077 11	5,559 56	586 78	
19	Dedham & Franklin,	435 28	38 95	5 00	485 01	479 68	623 41	46 05	
20	East Middlesex,	—	—	—	—	—	—	—	
21	East Taunton,	1,000 00	27 56	45 46	338 50	241 24	3,526 11	585 49	
22	Fitchburg & Leominster,	10,918 25	4,670 14	5 00	1,929 64	88 69	10,010 78	3,772 47	
23	Gardner, Westminster & Fitchburg,	2,641 00	1,187 10	866 87	1,890 00	824 76	3,339 39	463 72	
24	Hampshire,	—	—	—	—	—	—	—	
25	Hartford & Worcester,	—	—	—	—	—	—	—	

26	Haverhill & Amesbury,	4,007 72	306 71	-	2,640 00	2,084 32	5,205 32	2,398 70
27	Haverhill & Plaistow,	599 78	155 43	54 45	207 60	350 93	1,104 08	372 47
28	Haverhill & Southern New Hampshire,	2,064 45	534 64	188 16	507 08	1,400 70	3,799 09	743 71
29	Holyoke,	13,415 81	729 29	-	2,440 35	2,155 29	55,706 08	5,345 05
30	Interstate Consolidated,	4,399 99	871 57	386 70	1,954 68	-	3,862 73	2,777 35
31	Lawrence & Methuen,	3,188 91	826 68	292 24	784 38	2,018 61	3,616 97	1,119 20
32	Lexington & Boston,	3,274 37	3,171 08	752 55	3,317 14	100 17	3,524 51	3,441 84
33	Linwood,	825 00	132 50	100 00	-	-	683 13	115 42
34	Lowell, Acton & Maynard,	-	-	-	-	-	187 60	53 20
35	Lowell & Fitchburg,	2,592 68	875 47	750 00	728 25	89 88	828 56	351 29
36	Lowell & Pelham,	637 60	164 39	57 26	156 11	485 07	696 27	225 97
37	Marlborough & Westborough,	-	12 00	-	1,318 45	307 13	4,568 44	451 70
38	Martha's Vineyard,	-	-	-	-	-	-	-
39	Medfield & Medway,	435 28	117 13	55 00	100 40	73 91	782 89	138 60
40	Milford, Attleborough & Woonsocket,	1,434 62	391 51	82 00	2,389 55	935 14	4,367 34	848 32
41	Milford & Uxbridge,	5,596 92	216 54	-	2,580 00	2,140 45	13,105 28	4,436 49
42	Mount Tom,	-	-	-	-	-	-	-
43	Nahant & Lynn,	4,333 50	1,669 16	-	1,130 21	2,303 25	1,795 57	5 73
44	Natick & Cohituate,	5,654 53	2,006 04	756 39	875 61	1,234 40	2,598 40	1,047 35
45	New Bedford & Onset,	3,257 81	148 04	2 00	1,572 76	283 22	2,360 71	348 80
46	Newton,	9,688 34	8,138 28	2,121 26	4,525 35	313 92	9,945 36	3,340 32
47	Newton & Boston,	1,610 71	1,410 64	435 66	1,605 04	66 77	7,085 11	2,654 65
48	Newtonville & Watertown,	-	-	-	-	-	-	-
49	Norfolk & Bristol,	3,212 92	991 51	-	796 05	398 62	5,114 81	1,090 30
50	Northampton,	<u>5,275 01</u>	<u>1,361 52</u>	<u>2,031 76</u>	<u>1,904 71</u>	<u>1,22 91</u>	<u>18,286 53</u>	<u>3,681 69</u>
51	North End,	-	-	-	-	-	-	-
52	Norton & Taunton,	1,931 00	279 85	57 44	978 50	-	3,061 31	757 37
53	Norwood, Canton & Sharon,	1,269 98	48 96	1,436 82	300 20	80 10	30 76	70 78
54	Old Colony,	63,314 01	13,613 03	9,222 66	26,199 46	45,614 88	96,828 19	59,379 37
55	Pittsfield Electric,	5,200 00	1,113 13	891 48	1,508 50	1,165 19	11,193 51	4,885 83

Tabulated Statements from Returns of Street Railway Companies — Continued.

		OPERATING EXPENSES FOR THE YEAR ENDING SEPTEMBER 30, 1907 — Continued.						
RAILWAY COMPANIES.		29.—Salaries of Officers and Clerks.	30.—Office Expenses and Supplies.	31.—Legal Expenses.	32.—Insur- ance.	33.—Other General Expenses.	34.—Repair of Roadbed and Track.	35.—Repair of Electric Line Construction.
56	Plymouth, Carver & Wareham,	—	—	—	—	—	—	—
57	Plymouth & Sandwich,	\$393 17	\$65 45	—	\$104 40	\$46 21	\$485 65	—
58	Providence & Fall River,	2,237 05	374 73	—	1,590 00	601 47	1,866 01	\$333 25
59	Shelburne Falls & Colrain,	1,386 57	455 44	—	462 90	12 00	1,874 67	486 76
60	Somerville,	—	—	—	—	—	—	—
61	(South Middlesex (receiver),	2,479 39	1,429 20	\$283 44	720 17	66 77	440 27	532 93
62	Middlesex & Boston,	325 73	423 99	51 56	118 68	—	55 60	284 94
63	Springfield,	28,657 79	7,405 58	4,241 66	6,674 38	9,445 10	69,587 27	19,248 90
64	Springfield & Eastern,	—	—	—	—	—	—	—
65	Taunton & Pawtucket,	820 00	666 95	189 68	1,705 92	309 25	2,232 08	194 31
66	Templeton,	520 00	235 72	—	—	378 94	3,231 18	247 12
67	Union,	9,700 64	733 28	112 00	4,136 52	2,900 25	38,668 62	5,154 41
68	Uxbridge & Blackstone,	1,801 23	238 19	25 00	313 27	356 92	1,201 37	90 17
69	Waltham,	25 00	65 00	—	60 00	—	—	—
70	Ware & Brookfield,	440 00	163 56	—	621 88	—	1,586 32	143 28
71	Warren, Brookfield & Spencer,	4,099 92	1,860 23	—	1,107 41	—	2,899 61	528 03
72	Webster & Dudley,	—	—	—	—	—	—	—
73	Webster & Dudley and Worcester	—	—	—	—	—	—	—
74	Webster (lessee),	1,107 72	177 65	75 26	295 37	611 50	3,248 80	128 00*
75	Westborough & Hopkinton,	—	35 67	—	23 16	—	7 14	169 20
76	West End,	—	—	—	—	—	—	—
77	Western Massachusetts,	2,340 00	278 90	—	931 04	309 18	3,085 52	561 91
78	Winnisimmet,	—	—	—	—	—	—	—

76	Worcester & Blackstone Valley, .	3,014 91	347 65	-	1,013 41	2,039 95	7,034 61	2,200 87
77	Worcester Consolidated, .	52,271 24	5,747 90	3,111 53	14,304 24	11,648 32	91,353 66	18,635 99
78	Worcester & Holden, .	2,972 22	408 67	-	1,237 41	-	903 38	181 31
79	Worcester & Northern, .	-	-	-	-	-	-	-
80	Worcester & Providence, .	-	-	-	-	-	-	-
81	Worcester & Shrewsbury R.R., .	-	-	-	-	-	-	-
82	Worcester & Shrewsbury Street Ry., .	-	-	-	-	-	-	-
83	Worcester & Southbridge, .	5,615 62	1,040 23	336 12	2,107 57	1,421 13	13,940 71	3,419 57
84	Worcester & Webster, .	-	-	-	-	-	-	-
85	Woronoco, .	1,672 94	255 95	41 67	851 40	197 75	1,806 82	618 23
	Totals, .	\$689,488 49	\$172,379 33	\$408,388 91	\$283,450 17	\$390,530 23	\$1,483,345 01	\$454,898 28

* Credit.

Tabulated Statements from Returns of Street Railway Companies — Continued.

RAILWAY COMPANIES.		OPERATING EXPENSES FOR THE YEAR ENDING SEPTEMBER 30, 1907 — Continued.						
		36. — Repair of Buildings.	37. — Repair of Cars.	38. — Repair of Electric Car Equipment.	39. — Repair of Miscellaneous Equipment.	40. — Provender and Stabling.	41. — Cost of Electric Motive Power.	42. — Wages of Employees.
1	Amesbury & Hampton,	\$96 60	\$2,797 49	—	—	—	\$6,379 12	\$6,518 49
2	Amherst & Sunderland,	7 22	3,550 21	\$2,087 12	—	—	10,072 48	7,333 40
3	Athol & Orange,	—	1,738 84	4,323 91	—	—	5,995 16	8,282 64
4	Berkshire,	2,469 71	18,911 89	16,802 64	\$2,477 33	\$857 63	93,182 19	77,858 67
5	Blue Hill,	199 01	3,146 87	7,297 12	284 51	—	15,589 13	24,575 38
6	Boston & Chelsea,	—	—	—	—	—	—	—
7	Boston Elevated,	131,578 09	491,301 19	465,489 57	20,244 10	34,598 76	1,402,693 90	4,161,600 01
8	Boston & Northern,	12,378 86	182,426 97	142,086 89	11,027 79	10,365 13	524,913 01	1,149,589 16
9	Boston & Revere Electric,	—	—	—	—	—	—	—
10	Boston & Worcester,	498 58	26,962 29	20,769 54	—	—	74,870 52	76,187 65
11	Bristol & Norfolk,	19 57	786 59	608 36	—	—	4,244 93	3,173 53
12	Brockton & Plymouth,	159 83	4,772 25	4,368 40	123 44	93 66	13,395 21	23,084 19
13	Citizens' Electric,	886 52	3,334 14	3,208 43	—	—	21,231 11	17,856 88
14	Connecticut Valley,	301 21	5,425 92	5,175 21	—	—	36,511 90	43,847 06
15	Concord, Maynard & Hudson,	136 43	2,960 99	867 28	—	—	11,943 49	10,690 40
16	Conway Electric,	13 95	374 88	94 20	—	—	261 82	3,978 20
17	Cottage City & Edgartown Traction,	456 87	—	108 84	—	—	1,120 55	1,526 94
18	Dartmouth & Westport,	—	8,646 79	3,756 65	—	—	—	25,187 49
19	Dedham & Franklin,	33 23	1,610 61	1,852 33	81 36	—	7,703 53	6,819 88
20	East Middlesex,	—	—	—	—	—	—	—
21	East Taunton,	249 90	1,627 08	939 04	—	—	6,022 96	7,741 46
22	Fitchburg & Leominster,	173 33	6,855 51	5,729 56	480 49	1,624 75	35,232 78	56,331 87
23	Gardner, Westminster & Fitchburg,	130 76	1,985 75	2,368 06	—	—	10,949 35	13,681 95
24	Hampshire,	—	—	—	—	—	—	—
25	Hartford & Worcester,	—	—	—	—	—	—	—

26	Haverhill & Amesbury,	792 23	5,907 27	9,074 03	-	-	21,546 48	26,812 17
27	Haverhill & Plaistow,	50 72	1,380 64	-	-	-	7,090 92	3,154 27
28	Haverhill & Southern New Hampshire,	115 03	6,104 12	-	-	-	10,616 72	10,743 91
29	Holyoke,	1,386 49	23,541 84	21,049 79	-	743 95	45,395 48	105,527 22
30	Interstate Consolidated,	323 06	-	-	-	-	34,552 79	31,547 36
31	Lawrence & Methuen,	185 33	9,297 21	-	-	-	22,844 72	16,262 98
32	Lexington & Boston,	290 99	6,407 74	7,477 05	597 42	837 47	29,265 20	38,509 39
33	Linwood,	-	387 09	234 75	-	-	1,663 00	3,700 65
34	Lowell, Acton & Maynard,	-	-	-	-	-	2,004 94	2,424 79
35	Lowell & Fitchburg,	46 79	3,313 74	1,556 91	36 48	-	14,222 83	8,001 86
36	Lowell & Pelham,	33 66	1,923 61	-	-	-	3,371 66	3,437 02
37	Marlborough & Westborough,	99 81	1,244 18	1,694 47	30 59	-	310 14*	7,152 95
38	Martha's Vineyard,	-	-	-	-	-	-	-
39	Medfield & Medway,	2 15	488 43	984 08	28 13	-	5,477 50	7,459 18
40	Milford, Attleborough & Woonsocket,	296 79	4,252 41	3,376 92	197 81	9 00	12,035 32	20,096 67
41	Milford & Uxbridge,	1,288 57	6,013 46	4,946 66	-	-	23,231 90	44,732 20
42	Mount Tom,	-	-	-	-	-	-	-
43	Nahant & Lynn,	38 32	1,333 56	1,214 42	-	-	5,272 06	12,490 09
44	Natick & Cohitate,	98 11	5,988 49	1,501 94	442 94	196 21	26,294 57	29,952 51
45	New Bedford & Onset,	604 48	5,057 73	4,641 72	55 81	-	21,668 19	20,612 20
46	Newton,	2,519 57	7,931 62	6,083 17	1,285 72	2,300 41	72,911 14	107,573 05
47	Newton & Boston,	304 39	4,566 89	4,066 60	286 35	240 00	13,592 36	24,339 53
48	Newtonville & Watertown,	-	-	-	-	-	-	-
49	Norfolk & Bristol,	590 06	2,510 54	2,544 59	-	-	20,414 07	20,382 93
50	Northampton,	594 89	7,207 06	6,728 14	884 90	224 92	24,021 07	40,342 35
51	North End,	-	-	-	-	-	-	-
52	Norton & Taunton,	132 04	2,944 75	5,491 81	43 90	-	13,263 80	13,945 85
53	Norwood, Canton & Sharon,	26 90	355 82	255 93	-	-	4,072 88	4,782 38
54	Old Colony,	8,244 87	110,625 60	99,040 91	8,811 14	4,370 00	296,532 49	676,160 71
55	Pittsfield Electric,	1,042 15	8,909 48	22,219 27	64 88	522 99	38,135 71	43,645 33

* Credit.

Tabulated Statements from Returns of Street Railway Companies — Continued.

RAILWAY COMPANIES.		OPERATING EXPENSES FOR THE YEAR ENDING SEPTEMBER 30, 1907 — Continued.						
		36.—Repair of Buildings.	37.—Repair of Cars.	38.—Repair of Electric Car Equipment.	39.—Repair of Miscellaneous Equipment.	40.—Provender and Stabling.	41.—Cost of Electric Motive Power.	42.—Wages of Employees.
56	Plymouth, Carver & Wareham,	—	—	—	—	—	—	—
57	Plymouth & Sandwich,	—	—	\$79 23	\$350 06	—	\$1,980 91	\$2,276 79
58	Providence & Fall River,	—	\$5,812 05	5,954 13	—	—	16,524 83	11,078 19
59	Shelburne Falls & Colrain,	\$187 77	187 91	1,026 49	—	—	3,904 60	2,949 95
60	Somerville,	—	—	—	—	—	—	—
61	{South Middlesex (receiver),	372 65	1,067 97	2,444 71	245 76	\$84 42	17,834 90	16,378 75
62	{Middlesex & Boston,	96 88	149 65	371 15	77 15	8 49	1,776 28	2,699 31
63	Springfield,	2,035 39	78,815 54	71,063 17	7,038 41	3,231 61	202,431 03	318,338 85
64	Springfield & Eastern,	—	—	—	—	—	—	—
65	Taunton & Pawtucket,	65 44	2,160 26	2,773 55	1,662 30	—	13,306 47	15,400 67
66	Templeton,	42 49	3,214 31	2,524 05	—	—	11,338 38	13,012 30
67	Union,	2,855 21	20,241 19	8,810 31	825 99	1,618 92	42,103 66	126,645 69
68	Uxbridge & Blackstone,	67 27	549 36	148 44	33	—	5,845 30	6,978 98
69	Waltham,	—	—	—	—	—	—	—
70	Ware & Brookfield,	—	3,045 67	1,317 64	—	—	10,133 58	7,836 99
71	Warren, Brookfield & Spencer,	237 02	2,561 20	1,323 01	1,471 43	—	10,825 76	16,467 53
72	{Webster & Dudley,	—	—	—	—	—	—	—
73	{Webster & Dudley and Worcester & Webster (lessee),	202 12	1,986 73	531 41	724 37	—	7,268 61	8,956 94
74	Westborough & Hopkinton,	16 80	444 44	445 21	—	—	5,608 85	3,516 57
75	West End,	—	—	—	—	—	—	—
76	Western Massachusetts,	15 42	1,358 55	722 35	164 75	73 98	12,245 38	19,106 00
77	Winnisimmet,	—	—	—	—	—	—	—

76	Worcester & Blackstone Valley, . . .	589 97	2,943 38	1,322 33	424 74	-	12,759 00	14,073 71
77	Worcester Consolidated, . . .	5,309 25	62,687 75	77,050 55	9,169 24	6,151 61	261,543 67	341,250 49
78	Worcester & Holden, . . .	170 43	1,320 83	1,104 68	-	-	13,704 74	11,044 14
79	Worcester & Northern, . . .	-	-	-	-	-	-	-
80	Worcester & Providence, . . .	-	-	-	-	-	-	-
81	Worcester & Shrewsbury R.R., . . .	-	-	-	-	-	-	-
82	Worcester & Shrewsbury Street Ry., . . .	-	-	-	-	-	-	-
83	Worcester & Southbridge, . . .	589 12	9,287 68	4,312 23	1,107 68	-	24,329 13	46,368 02
84	Worcester & Webster, . . .	-	-	-	-	-	-	-
85	Woronoco, . . .	128 88	2,282 00	2,103 83	22 98	126 07	5,849 03	14,367 82
	Totals, . . .	\$181,879 18	\$1,197,026 01	\$1,077,544 78	\$70,770 28	\$68,279 98	\$3,732,814 91	\$8,048,402 49

Tabulated Statements from Returns of Street Railway Companies — Continued.

RAILWAY COMPANIES.		OPERATING EXPENSES FOR THE YEAR ENDING SEPTEMBER 30, 1907 — Continued.						
		43. — Removing Snow and Ice.	44. — Damages for Injuries.	45. — Tolls for Trackage Rights.	46. — Rents of Buildings, etc.	47. — Other Transportation Expenses.	48. — Total Operating Ex- penses.	49. — Per Cent to Earnings from Operation.
1	Amesbury & Hampton,	\$437 47	\$729 69	\$99 98	\$34 20	\$1,181 24	\$25,411 36	97.04
2	Amherst & Sunderland,	207 60	5,156 65	123 26	—	1,610 24	39,429 89	—
3	Athol & Orange,	418 23	—	—	—	702 81	33,847 16	74.11
4	Berkshire,	1,786 17	11,792 04	—	1,021 20	—	298,414 23	73.66
5	Blue Hill,	530 39	1,800 00	306 46	310 00	948 49	66,828 94	78.93
6	Boston & Chelsea,	—	—	—	—	—	—	—
7	Boston Elevated,	117,397 99	507,578 99	12,943 75	47,851 45	340,789 39	9,647,145 28	69.11
8	Boston & Northern,	47,250 00	228,791 29	42,118 62	22,407 67	128,852 02	2,966,303 57	64.22
9	Boston & Revere Electric,	—	—	—	—	—	—	—
10	Boston & Worcester,	1,548 44	6,213 72	636 21	—	8,912 67	265,446 76	50.69
11	Bristol & Norfolk,	58 13	—	249 49	—	—	11,016 93	89.77
12	Brookton & Plymouth,	493 11	600 22	—	548 49	1,345 40	71,667 79	62.44
13	Citizens' Electric,	439 75	2,059 19	149 72	1,229 98	441 83	63,959 44	60.12
14	Connecticut Valley,	2,546 26	1,622 07	405 62	1,086 62	2,560 45	124,236 98	69.02
15	Concord, Maynard & Hudson,	434 14	486 90	750 00	24 00	1,605 60	36,032 20	60.07
16	Conway Electric,	—	—	—	—	—	6,052 56	43.67
17	Cottage City & Edgartown Traction,	—	—	—	—	—	4,259 52	81.41
18	Dartmouth & Westport,	382 25	1,992 67	56,826 89	3,425 34	20,927 33	134,553 42	64.20
19	Dedham & Franklin,	168 85	—	—	—	1,102 65	21,485 82	92.42
20	East Middlesex,	—	—	—	—	—	—	—
21	East Taunton,	178 75	35 75	436 50	1,159 69	715 81	24,871 30	61.68
22	Fitchburg & Leominster,	2,671 01	8,555 17	—	1,221 34	11,986 88	162,257 66	62.29
23	Gardner, Westminster & Fitchburg,	307 04	1,579 60	—	—	1,490 24	43,705 59	67.39
24	Hampshire,	—	—	—	—	—	—	—
25	Hartford & Worcester,	—	—	—	—	—	—	—

26	Haverhill & Amesbury,	715 65	1,425 55	430 15	—	670 24	84,016 54	68.97
27	Haverhill & Plaistow,	235 78	587 52	—	17 37	579 70	15,941 66	79.38
28	Haverhill & Southern New Hampshire,	266 66	1,381 60	53 50	59 96	1,669 65	40,248 98	85.98
29	Holyoke,	2,649 67	18,407 35	—	—	1,831 70	300,325 36	68.00
30	Interstate Consolidated,	1,290 80	13,959 29	—	18,552 16	—	114,478 48	65.61
31	Lawrence & Methuen,	435 95	2,352 97	690 18	93 34	2,549 90	66,559 57	82.49
32	Lexington & Boston,	2,170 08	6,882 07	—	508 70	130 18	110,657 95	73.22
33	Linwood,	—	—	1,247 25	300 00	546 00	9,934 79	72.36
34	Lowell, Acton & Maynard,	68 35	3 00	—	668 35	—	5,410 23	77.58
35	Lowell & Fitchburg,	60 55	58 09	—	171 94	—	33,685 32	86.99
36	Lowell & Pelham,	75 35	349 32	—	18 30	526 29	12,157 88	104.12
37	Marlborough & Westborough,	312 76	1,471 46	—	—	273 59	18,627 39	61.57
38	Martha's Vineyard,	—	—	—	—	—	—	—
39	Medfield & Medway,	241 87	321 20	—	—	711 26	17,417 01	78.12
40	Milford, Attleborough & Woonsocket,	271 67	2,978 95	346 63	4,693 00	—	59,003 65	59.30
41	Milford & Uxbridge,	1,166 59	8,701 15	—	—	1,400 66	119,556 87	66.84
42	Mount Tom,	—	—	—	—	—	—	—
43	Nahant & Lynn,	433 22	17 00	—	50 00	873 15	32,959 24	69.64
44	Natick & Cohituate,	941 58	4,413 18	—	306 43	100 33	83,298 01	83.23
45	New Bedford & Onset,	447 56	2,945 75	—	622 03	8,034 85	72,663 66	61.55
46	Newton,	3,912 04	17,607 76	6,774 08	1,263 63	296 29	268,531 31	75.09
47	Newton & Boston,	1,202 01	3,621 06	2,228 41	509 96	24 56	69,850 70	94.39
48	Newtonville & Watertown,	—	—	—	—	—	—	—
49	Norfolk & Bristol,	461 25	809 33	757 66	—	419 47	60,494 11	87.64
50	Northampton,	1,708 93	14,520 91	—	—	1,544 46	130,441 76	74.75
51	North End,	—	—	—	—	—	—	—
52	Norton & Taunton,	981 54	644 00	801 34	—	1,155 90	46,470 40	81.20
53	Norwood, Canton & Sharon,	208 73	388 93	—	—	237 96	13,567 13	121.31
54	Old Colony,	15,750 00	134,387 23	1,098 90	13,662 42	104,744 93	1,787,600 80	64.24
55	Pittsfield Electric,	2,037 67	—	—	—	3,121 85	145,656 97	71.11

Tabulated Statements from Returns of Street Railway Companies — Continued.

RAILWAY COMPANIES.		OPERATING EXPENSES FOR THE YEAR ENDING SEPTEMBER 30, 1907 — Concluded.						
		43. — Removing Snow and Ice.	44. — Damages for Injuries.	45. — Tolls for Trackage Rights.	46. — Rents of Buildings, etc.	47. — Other Transportation Expenses.	48. — Total Operating Ex- penses.	49. — Per Cent to Earnings from Operation.
56	Plymouth, Carver & Wareham, . . .	—	—	—	—	—	—	—
57	Plymouth & Sandwich, . . .	\$337 40	\$27 55	—	—	—	\$6,146 82	73.03
58	Providence & Fall River, . . .	84 51	218 01	—	—	\$396 44	47,070 67	76.27
59	Shelburne Falls & Colrain, . . .	94 89	125 74	—	\$50 00	2,906 56	16,112 25	77.01
60	Somerville, . . .	—	—	—	—	—	—	—
61	South Middlesex (receiver), . . .	547 79	9,943 28	—	197 40	—	55,069 80	—
62	Middlesex & Boston, . . .	—	654 02	—	29 68	—	7,123 11	—
63	Springfield, . . .	6,543 24	73,964 52	—	3,077 27	—	911,799 71	69.97
64	Springfield & Eastern, . . .	—	—	—	—	—	—	—
65	Taunton & Pawtucket, . . .	143 24	1,342 10	\$1,593 44	333 33	530 16	45,429 15	87.73
	Templeton, . . .	421 11	1,339 85	—	—	560 15	37,065 60	83.73
66	Union, . . .	3,190 71	12,753 95	—	15,801 97	5,863 38	302,116 70	64.58
67	Uxbridge & Blackstone, . . .	24 90	367 01	—	17 27	44 10	18,069 11	60.85
68	Waltham, . . .	—	—	—	—	—	150 00	—
69	Ware & Brookfield, . . .	230 34	—	—	—	153 59	25,672 85	104.56
70	Warren, Brookfield & Spencer, . . .	481 20	612 57	—	—	208 85	44,683 77	72.50
71	Webster & Dudley, . . .	—	—	—	—	—	—	—
	Webster & Dudley and Worcester &							
	Webster (lessee), . . .	611 44	977 22	14 38	143 74	—	26,805 26	—
72	Westborough & Hopkinton, . . .	170 81	668 46	—	12 00	—	11,118 31	79.91
73	West End, . . .	—	—	—	—	—	—	—
74	Western Massachusetts, . . .	141 80	2,703 55	—	—	—	44,038 33	49.91
75	Winnisimmet, . . .	—	—	—	—	—	—	—

76	Worcester & Blackstone Valley, .	187 33	2,512 15	36 92	51 87	-	50,642 80	58.17
77	Worcester Consolidated, .	8,117 51	80,901 70	565 63	265 50	32,991 64	1,083,077 42	65.99
78	Worcester & Holden, .	152 17	14 00	36 73	-	895 83	34,146 54	78.09
79	Worcester & Northern, .	-	-	-	-	-	-	-
80	Worcester & Providence, .	-	-	-	-	-	-	-
81	Worcester & Shrewsbury R.R., .	-	-	-	-	-	-	-
82	Worcester & Shrewsbury Street Ry., .	-	-	-	-	-	-	-
83	Worcester & Southbridge, .	759 79	6,574 51	945 86	1,526 63	-	123,681 60	54.65
84	Worcester & Webster, .	-	-	-	-	-	-	-
85	Woronoco, .	770 04	1,687 81	-	383 00	-	33,166 22	-
	Totals,	\$238,312 06	\$1,214,616 62	\$132,667 56	\$143,707 23	\$701,166 67	\$20,689,668 19	67.71

Tabulated Statements from Returns of Street Railway Companies — Continued.

RAILWAY COMPANIES.		EXHIBIT FOR THE YEAR ENDING SEPTEMBER 30, 1907.						
		50. — Net Earnings from Operation.	51. — All Other Income.	52. — Total Income above Operating Expenses.	53. — Interest on Funded Debt.	54. — Interest and Discount on Unfunded Debt.	55. — Taxes.	56. — Rentals of Leased Railways.
1	Amesbury & Hampton,	\$775 88	—	\$775 88	\$5,000 00	\$3,280 00	\$426 23	—
2	Amherst & Sunderland,	9,776 32 <i>d</i>	\$59 49	9,716 83 <i>d</i>	4,875 00	703 69	1,788 58	—
3	Athol & Orange,	11,826 49	—	11,826 49	3,000 00	—	2,526 63	—
4	Berkshire,	106,723 57	4,148 27	110,871 84	67,000 00	17,966 30	14,231 45	—
5	Blue Hill,	17,837 30	561 24	18,398 54	12,500 00	10,202 91	2,735 95	—
6	Boston & Chelsea,	—	7,560 00	7,560 00	—	—	—	—
7	Boston Elevated,	4,305,820 72	58,201 72	4,364,022 44	956,707 79	—	966,974 68	\$1,250,416 50
8	Boston & Northern,	1,652,688 70	11,313 79	1,664,002 49	506,271 67	124,952 27	267,739 70	113,537 24
9	Boston & Revere Electric,	—	2,500 00	2,500 00	—	—	—	—
10	Boston & Worcester,	258,195 56	—	258,195 56	77,760 40	36,104 54	37,796 58	—
11	Bristol & Norfolk,	1,255 77	—	1,255 77	—	—	211 41	—
12	Brockton & Plymouth,	43,103 76	6,977 26	50,081 02	13,450 00	7,996 58	5,488 90	—
13	Citizens' Electric,	42,433 08	—	42,433 08	10,855 97	2,637 84	6,367 35	—
14	Connecticut Valley,	55,773 23	—	55,773 23	25,000 00	8,581 11	5,691 34	—
15	Concord, Maynard & Hudson,	23,949 72	—	23,949 72	8,250 00	6,425 57	1,850 20	—
16	Conway Electric,	7,809 21	—	7,809 21	1,750 00	3,189 04	197 31	—
17	Cottage City & Edgartown Traction,	973 93	—	973 93	—	354 50	72 11	280 00
18	Dartmouth & Westport,	75,027 59	—	75,027 59	4,500 00	—	10,490 20	—
19	Dedham & Franklin,	1,762 10	—	1,762 10	5,000 00	485 26	426 21	—
20	East Middlesex,	—	30,049 76	30,049 76	—	—	—	—
21	East Taunton,	15,447 67	—	15,447 67	2,250 00	12 50	2,313 50	—
22	Fitchburg & Leominster,	98,210 80	28,702 38	126,913 18	19,250 00	30,887 68	14,309 28	—
23	Gardner, Westminister & Fitchburg,	21,195 21	260 00	21,455 21	8,207 50	2,599 75	2,161 54	—
24	Hampshire,	—	3,206 33	3,206 33	—	—	—	—
25	Hartford & Worcester,	—	821 66	821 66	—	—	19 18	—

26	Haverhill & Amesbury, . . .	37,806 24	—	37,806 24	26,500 00	16,956 22	3,325 45	—
27	Haverhill & Plaistow, . . .	4,141 06	—	4,141 06	1,500 00	—	628 86	—
28	Haverhill & Southern New Hampshire, . . .	6,676 44	—	6,676 44	4,000 00	2,730 00	1,111 83	—
29	Holyoke, . . .	141,332 11	39,121 36	180,453 47	30,000 00	1,094 67	38,218 57	8,250 00
30	Interstate Consolidated, . . .	60,012 67	—	60,012 67	—	6,000 00	9,760 08	—
31	Lawrence & Methuen, . . .	12,913 17	—	12,913 17	6,250 00	2,848 00	2,007 52	—
32	Lexington & Boston, . . .	40,476 83	—	40,476 83	21,162 50	13,293 11	5,753 27	—
33	Linwood, . . .	3,794 52	—	3,794 52	—	—	555 14	—
34	Lowell, Acton & Maynard, . . .	1,563 16	—	1,563 16	—	1,879 87	111 04	—
35	Lowell & Fitchburg, . . .	5,040 14	—	5,040 14	12,812 50	630 80	773 15	—
36	Lowell & Pelham, . . .	480 94 ^d	—	480 94 ^d	2,000 00	1,180 00	104 16	—
37	Marlborough & Westborough, . . .	11,625 88	1,000 00	12,625 88	8,000 00	5,040 51	1,402 48	—
38	Martha's Vineyard, . . .	—	280 00	280 00	—	—	—	—
39	Medfield & Medway, . . .	4,877 43	—	4,877 43	5,000 00	2,562 26	255 70	—
40	Milford, Attleborough & Woonsocket, . . .	40,349 35	6,117 45	46,466 80	12,500 00	1,356 89	3,579 63	—
41	Milford & Uxbridge, . . .	59,314 59	—	59,314 59	20,750 00	13,007 06	6,974 39	—
42	Mount Tom, . . .	—	6,092 26	6,092 26	—	—	—	—
43	Nahant & Lynn, . . .	14,366 28	—	14,366 28	3,750 00	2,311 49	2,341 79	—
44	Natick & Cohituate, . . .	16,780 04	—	16,780 04	—	12,103 50	2,663 03	—
45	New Bedford & Onset, . . .	45,224 10	—	45,224 10	14,000 00	2,979 67	5,175 11	—
46	Newton, . . .	89,057 31	—	89,057 31	28,750 00	25,847 44	14,046 09	—
47	Newton & Boston, . . .	4,154 31	—	4,154 31	10,000 00	21,860 58	2,652 50	—
48	Newtonville & Watertown, . . .	—	—	—	—	3,364 42	1,068 75	—
49	Norfolk & Bristol, . . .	8,534 60	—	8,534 60	—	—	208 08	—
50	Northampton, . . .	44,045 62	—	44,045 62	10,250 00	10,871 68	10,557 75	—
51	North End, . . .	—	8,012 15	8,012 15	3,750 00	—	—	—
52	Norton & Taunton, . . .	10,633 57	—	10,633 57	14,800 00	1,118 89	1,631 04	—
53	Norwood, Canton & Sharon, . . .	2,384 14 ^d	—	2,384 14 ^d	—	—	5 27	—
54	Old Colony, . . .	994,354 25	124,708 38	1,119,062 63	347,502 50	84,086 18	155,730 95	90,859 99
55	Pittsfield Electric, . . .	57,768 10	105 00	57,873 10	9,510 44	2,373 34	11,259 87	—

d Deficit.

Tabulated Statements from Returns of Street Railway Companies — Continued.

EXHIBIT FOR THE YEAR ENDING SEPTEMBER 30, 1907—Continued.								
RAILWAY COMPANIES.		50.—Net Earnings from Operation.	51.—All Other Income.	52.—Total In- come above Oper- ating Expenses.	53.—Interest on Funded Debt.	54.—Interest and Discount on Unfunded Debt.	55.—Taxes.	56.—Rentals of Leased Rail- ways.
56	Plymouth, Carver & Wareham, . . .	—	—	—	—	—	—	—
57	Plymouth & Sandwich, . . .	\$2,270 46	—	\$2,270 46	—	\$616 98	\$553 30	—
58	Providence & Fall River, . . .	14,645 61	—	14,645 61	\$8,250 00	4,429 06	1,955 29	—
59	Shelburne Falls & Colrain, . . .	4,808 34	—	4,808 34	3,000 00	152 13	272 69	—
60	Somerville, . . .	—	\$9,180 00	9,180 00	—	—	—	—
61	South Middlesex (receiver), . . .	21,635 47	—	21,635 47	4,361 12	—	2,517 35	—
62	Middlesex & Boston, . . .	6,047 73	—	6,047 73	638 88	937 50	378 20	—
63	Springfield, . . .	391,245 67	3,683 44	394,929 11	60,000 00	9,627 82	108,402 27	\$36,873 40
64	Springfield & Eastern, . . .	—	31,500 00	31,500 00	16,500 00	—	—	—
65	Taunton & Pawtucket, . . .	7,495 60	—	7,495 60	10,000 00	1,101 29	1,579 34	—
66	Templeton, . . .	7,199 30	—	7,199 30	7,750 00	10,453 18	665 43	—
67	Union, . . .	165,736 26	—	165,736 26	20,000 00	10,550 36	33,334 63	—
68	Uxbridge & Blackstone, . . .	11,622 62	—	11,622 62	4,000 00	3,836 99	1,361 91	—
69	Waltham, . . .	5,310 00	—	5,310 00	5,000 00	120 00	8 25	—
70	Ware & Brookfield, . . .	1,118 59 ^d	—	1,118 59 ^d	6,750 00	—	125 35	—
71	Warren, Brookfield & Spencer, . . .	16,637 85	—	16,637 85	6,250 00	2,975 65	2,181 67	—
72	Webster & Dudley, . . .	—	14,500 00	14,500 00	1,500 00	—	—	10,500 00
73	Webster & Dudley and Worcester & Webster (lessee), . . .	6,117 24	51 89	6,169 13	—	—	—	7,250 00
74	Westborough & Hopkinton, . . .	2,799 15	—	2,799 15	2,000 00	120 00	138 67	—
75	West End, . . .	—	1,213,516 70	1,213,516 70	—	—	—	—
76	Western Massachusetts, . . .	44,199 60	3,798 30	47,997 90	11,562 50	7,474 99	6,821 30	—
77	Winnisimmet, . . .	—	3,000 00	3,000 00	—	—	—	—

76	Worcester & Blackstone Valley, .	34,705 00	-	6,000 00	6,267 68	3,418 32	-
77	Worcester Consolidated, .	558,187 46	-	49,950 00	137,500 04	111,358 65	13,087 50
78	Worcester & Holden, .	9,575 94	-	7,400 00	2,396 11	881 96	-
79	Worcester & Northern, .	-	-	-	-	-	-
80	Worcester & Providence, .	-	-	-	-	-	-
81	Worcester & Shrewsbury R.R., .	3,750 00	3,750 00	1,100 00	-	-	-
82	Worcester & Shrewsbury Street Ry., .	1,000 00	1,000 00	-	-	-	-
83	Worcester & Southbridge, .	102,641 91	2,695 45	31,500 00	7,622 01	9,955 82	7,250 00
84	Worcester & Webster, .	-	10,500 00	7,500 00	-	-	-
85	Woronoco, .	13,420 47	137 40	2,187 50	2,141 25	3,816 47	-
	Totals,	\$9,868,193 75	\$1,645,249 43	\$2,597,616 27	\$700,199 16	\$1,915,446 70	\$1,538,304 63

Deficit.

Tabulated Statements from Returns of Street Railway Companies — Continued.

EXHIBIT FOR THE YEAR ENDING SEPTEMBER 30, 1907 — Continued.								
RAILWAY COMPANIES.		57.—Pay- ments to Sinking Funds, etc.	58.—Other Deductions from Income.	59.—Total Charges on In- come.	60.—Net Divisible In- come.	61.—Dividends Declared.	62.—Per- centage of Divi- dend Declared.	63.—Surplus for the Year.
1	Amesbury & Hampton,	\$1,000 00	—	\$9,706 23	\$8,930 35d	—	—	—
2	Amherst & Sunderland,	—	\$441 80	7,809 07	17,525 90d	—	—	—
3	Athol & Orange,	—	—	5,526 63	6,299 86	\$5,960 00	8	\$339 86
4	Berkshire,	—	13,266 53	112,464 28	1,592 44d	—	—	—
5	Blue Hill,	—	—	25,438 86	7,040 32d	—	—	—
6	Boston & Chelsea,	—	300 00	300 00	7,260 00	7,260 00	6	—
7	Boston Elevated,	100,000 00	258,644 58	3,532,743 55	831,278 89	798,000 00	6	33,278 89
8	Boston & Northern,	—	23,575 92	1,036,076 80	627,925 69	552,160 00	5	75,765 69
9	Boston & Revere Electric,	—	—	—	2,500 00	2,500 00	5	—
10	Boston & Worcester,	—	—	151,661 52	106,534 04	103,500 00	6	3,034 04
11	Bristol & Norfolk,	—	5 22	216 63	1,039 14	—	—	1,039 14
12	Brockton & Plymouth,	—	9,410 34	36,345 82	13,735 20	—	—	13,735 20
13	Citizens' Electric,	—	—	19,861 16	22,571 92	12,000 00	5	10,571 92
14	Connecticut Valley,	—	763 42	40,035 87	15,737 36	9,948 00	21	5,789 36
15	Concord, Maynard & Hudson,	—	—	16,525 77	7,423 95	—	—	7,423 95
16	Conway Electric,	—	3,452 79	8,589 14	779 93d	—	—	—
17	Cottage City & Edgartown Traction,	—	500 00	1,206 61	232 68d	—	—	—
18	Dartmouth & Westport,	12,837 27	4,376 41	32,203 88	42,823 71	21,000 00	8	21,823 71
19	Dedham & Franklin,	—	—	5,911 47	4,149 37d	—	—	—
20	East Middlesex,	—	—	—	30,049 76	29,770 00	10	279 76
21	East Taunton,	—	—	4,576 00	10,871 67	5,500 00	5	5,371 67
22	Fitchburg & Leominster,	—	27,616 96	92,063 92	34,849 26	27,000 00	6	7,849 26
23	Gardner, Westminster & Fitchburg,	—	1,103 03	14,071 82	7,383 39	—	—	7,383 39
24	Hampshire,	—	—	—	3,206 33	3,000 00	5	206 33
25	Hartford & Worcester,	—	1 38	20 56	801 10	—	—	801 10

26	Haverhill & Amesbury,	-	47,560 32	9,754 08d	-	-	-	-	-
27	Haverhill & Plaistow,	-	2,128 86	2,012 20	-	-	-	-	2,012 20
28	Haverhill & Southern New Hampshire,	-	7,841 83	1,165 39d	-	-	-	-	-
29	Holyoke,	30,411 21	107,974 45	72,479 02	64,000 00	8 ²	-	-	8,479 02
30	Interstate Consolidated,	-	15,760 08	44,252 59	-	-	-	-	44,252 59
31	Lawrence & Methuen,	-	11,105 52	1,807 65	-	-	-	-	1,807 65
32	Lexington & Boston,	-	40,208 88	2,267 95	-	-	-	-	2,267 95
33	Linwood,	-	555 14	3,239 38	720 00	6	-	-	2,519 38
34	Lowell, Acton & Maynard,	-	1,990 91	427 75d	-	-	-	-	-
35	Lowell & Fitchburg,	-	14,216 45	9,176 31d	-	-	-	-	-
36	Lowell & Pelham,	-	3,284 16	3,765 10d	-	-	-	-	-
37	Marlborough & Westborough,	502 76	14,945 75	2,319 87d	-	-	-	-	-
38	Martha's Vineyard,	280 00	280 00	-	-	-	-	-	-
39	Medfield & Medway,	-	7,817 96	2,940 53d	-	-	-	-	-
40	Milford, Attleborough & Woonsocket,	11,022 33	28,458 85	18,007 95	-	-	-	-	18,007 95
41	Milford & Uxbridge,	934 73	41,666 18	17,648 41	13,200 00	3	-	-	4,448 41
42	Mount Tom,	-	-	6,092 26	6,000 00	6	-	-	92 26
43	Nahant & Lynn,	-	8,403 28	5,963 00	-	-	-	-	5,963 00
44	Natick & Cohituate,	-	14,766 53	2,013 51	2,000 00	2	-	-	13 51
45	New Bedford & Onset,	6,000 00	28,154 78	17,069 32	-	-	-	-	17,069 32
46	Newton,	-	68,643 53	20,413 78	18,050 00	2½	-	-	2,363 78
47	Newton & Boston,	-	34,513 08	30,358 77d	-	-	-	-	-
48	Newtonville & Watertown,	455 00	4,888 17	3,249 58	3,600 00	7½	-	-	-
49	Norfolk & Bristol,	-	208 08	8,326 52	-	-	-	-	8,326 52
50	Northampton,	-	31,679 43	12,366 19	21,000 00	7	-	-	-
51	North End,	61 06	3,811 06	4,201 09	4,125 00	3½	-	-	76 09
52	Norton & Taunton,	-	17,549 93	6,916 36d	-	-	-	-	-
53	Norwood, Canton & Sharon,	-	5 27	2,389 41d	-	-	-	-	-
54	Old Colony,	36,612 33	714,791 95	404,270 68	308,488 00	4	-	-	95,782 68
55	Pittsfield Electric,	2,136 00	32,334 84	25,538 26	24,000 00	8	-	-	1,538 26
		7,055 19							

¹ On \$497,400 capital stock.² On \$800,000 capital stock.³ Deficit.

Tabulated Statements from Returns of Street Railway Companies — Continued.

EXHIBIT FOR THE YEAR ENDING SEPTEMBER 30, 1907 — Continued.								
RAILWAY COMPANIES.		57. — Pay- ments to Sinking Funds, etc.	58. — Other Deductions from Income.	59. — Total Charges on In- come.	60. — Net Divisible In- come.	61. — Dividends Declared.	62. — Per- centage of Divi- dend Declared.	63. — Surplus for the Year.
56	Plymouth, Carver & Wareham,	—	—	—	—	—	—	—
57	Plymouth & Sandwich,	—	—	\$1,170 28	\$1,100 18	—	—	\$1,100 18
58	Providence & Fall River,	—	—	14,634 35	11 26	—	—	11 26
59	Shelburne Falls & Colrain,	—	\$952 76	4,377 58	430 76	—	—	430 76
60	Somerville,	—	—	—	9,180 00	\$9,180 00	6	—
61	South Middlesex (receiver),	—	—	6,878 47	14,757 00	—	—	14,757 00
62	Middlesex & Boston,	—	—	1,954 58	4,093 15	3,000 00	1	1,093 15
63	Springfield,	—	6,397 00	221,300 49	173,628 62	168,660 00	8 ¹	4,968 62
64	Springfield & Eastern,	—	236 50	16,736 50	14,763 50	14,800 00	4 ²	—
65	Taunton & Pawtucket,	—	—	12,680 63	5,185 03 ^d	—	—	—
66	Templeton,	—	—	18,868 61	11,669 31 ^d	—	—	—
67	Union,	—	—	63,884 99	101,851 27	72,000 00	8	29,851 27
68	Uxbridge & Blackstone,	—	—	9,198 90	2,423 72	1,620 00	2 ³	803 72
69	Waltham,	—	—	5,128 25	181 75	—	—	181 75
70	Ware & Brookfield,	—	—	6,875 35	7,993 94 ^d	—	—	—
71	Warren, Brookfield & Spencer,	—	1,761 76	13,169 08	3,468 77	—	—	3,468 77
72	Webster & Dudley,	—	—	12,000 00	2,500 00	2,500 00	5	—
73	Webster & Dudley and Worcester & Webster (lessee),	—	223 10	7,473 10	1,303 97 ^d	—	—	—
74	Westborough & Hopkinton,	—	—	2,258 67	540 48	—	—	540 48
75	West End,	—	8,284 15	8,284 15	1,205,232 55	1,204,947 50	7 and 8 ⁴	285 05
76	Western Massachusetts,	—	6,873 28	32,732 07	15,265 83	—	—	15,265 83
77	Winnisimmet,	—	—	—	3,000 00	3,000 00	6	—

76	Worcester & Blackstone Valley, .	-	-	15,686 00	19,019 00	-	19,019 00
77	Worcester Consolidated, .	-	50,258 37	362,154 56	196,032 90	5½	782 90
78	Worcester & Holden, .	-	-	10,678 07	1,102 13d	-	-
79	Worcester & Northern, .	-	-	-	-	-	-
80	Worcester & Providence, .	-	-	-	-	-	-
81	Worcester & Shrewsbury R.R., .	-	-	1,100 00	2,650 00	7½	26
82	Worcester & Shrewsbury Street Ry., .	-	-	-	1,000 00	5	-
83	Worcester & Southbridge, .	-	5,060 11	61,387 94	43,949 42	-	43,949 42
84	Worcester & Webster, .	3,000 00	-	10,500 00	-	-	-
85	Woronoco, .	-	99 43	8,244 65	5,313 22	-	5,313 22
	Totals,	\$123,892 46	\$512,798 91	\$7,388,258 13	\$4,125,185 05	\$3,721,388 24	\$549,536 48

¹ Four per cent on \$1,958,400 and four per cent on \$2,258,100 capital stock.

² On \$370,000 capital stock.

³ On \$81,000 capital stock.

⁴ Eight per cent on preferred and three and one-half per cent on \$9,689,250 and three and one-half per cent on \$10,109,250 common capital stock.

^d Deficit.

Tabulated Statements from Returns of Street Railway Companies — Continued.

RAILWAY COMPANIES.		EXHIBIT FOR THE YEAR ENDING SEPTEMBER 30, 1907 — Continued.						
		64. — Deficit for the Year.	65. — Surplus Sept. 30, 1906.	66. — Deficit Sept. 30, 1906.	67. — Credits during Year.	68. — Debits during Year.	69. — Surplus Sept. 30, 1907.	70. — Deficit Sept. 30, 1907.
1	Anesbury & Hampton,	\$8,930 35	\$7,083 18	—	—	\$17,400 00	—	\$19,247 17
2	Amherst & Sunderland,	17,525 90	—	\$8,651 08	\$26,176 98	—	—	—
3	Athol & Orange,	—	29,111 07	—	—	1,572 73	\$29,450 93	—
4	Berkshire,	1,592 44	82,162 92	—	—	13,811 46	78,997 75	—
5	Blue Hill,	7,040 32	—	38,520 29	3,750 00	—	—	55,622 07
6	Boston & Chelsea,	—	—	—	—	—	—	—
7	Boston Elevated,	—	2,727,224 30	—	—	55,000 00	2,705,503 19 ¹	—
8	Boston & Northern,	—	128,620 67	—	—	93,234 08	111,152 28	—
9	Boston & Revere Electric,	—	—	11,363 18	—	—	—	11,363 18
10	Boston & Worcester,	—	25,238 93	—	—	13,321 23	14,951 74	—
11	Bristol & Norfolk,	—	—	22,470 94	10,500 00	—	—	10,931 80
12	Brockton & Plymouth,	—	31,544 65	—	3,750 00	—	49,029 85	—
13	Citizens' Electric,	—	35,324 56	—	130 00	1,731 20	44,295 28	—
14	Connecticut Valley,	—	28,777 30	—	57 81	3,207 88	31,416 59	—
15	Concord, Maynard & Hudson,	—	7,847 51	—	26 70	2,145 00	13,153 16	—
16	Conway Electric,	779 93	—	6,877 21	—	—	—	7,657 14
17	Cottage City & Edgartown Traction,	232 68	45 40	—	—	—	—	187 28
18	Dartmouth & Westport,	—	135,657 41	—	—	—	157,481 12 ²	—
19	Dedham & Franklin,	4,149 37	—	8,182 68	—	—	—	12,332 05
20	East Middlesex,	—	—	10,195 69	—	—	—	9,915 93
21	East Taunton,	—	21,122 20	—	—	64 24	26,429 63	—
22	Fitchburg & Leominster,	—	19,951 98	—	204 26	7,401 12	20,604 38	—
23	Gardner, Westminster & Fitchburg,	—	14,272 98	—	—	1,316 90	20,339 47	—
24	Hampshire,	—	5,560 54	—	—	5,766 87	—	—
25	Hartford & Worcester,	—	—	—	—	—	801 10	—

26	Haverhill & Amesbury,	9,754 08	-	44,102 07	-	25,434 82	-	79,290 97
27	Haverhill & Plaistow,	-	13,083 17	-	-	-	15,095 37	-
28	Haverhill & Southern New Hampshire,	1,165 39	2,248 63	-	400 00	-	1,483 24	-
29	Holyoke,	-	89,747 92	-	5,766 87	34,176 98	69,816 83	-
30	Interstate Consolidated,	-	13,171 11	-	-	-	57,423 70	-
31	Lawrence & Methuen,	-	8,801 23	-	-	-	10,608 88	-
32	Lexington & Boston,	-	8,731 10	-	-	5,766 37	3,232 68	-
33	Linwood,	-	5,943 68	-	-	1,444 16	7,018 90	-
34	Lowell, Acton & Maynard,	427 75	-	254 76	1,539 68	-	857 17	-
35	Lowell & Fitchburg,	9,176 31	4,751 95	-	-	-	-	4,424 36
36	Lowell & Pelham,	3,765 10	-	9,313 30	-	-	-	13,078 40
37	Marlborough & Westborough,	2,319 87	-	25,780 82	160 69	1,030 16	-	28,970 16
38	Martha's Vineyard,	-	-	-	-	-	-	-
39	Medfield & Medway,	2,940 53	-	9,578 43	-	-	-	12,518 96
40	Milford, Attleborough & Woonsocket,	-	36,020 47	-	-	5,233 31	48,795 11	-
41	Milford & Uxbridge,	-	19,027 74	-	-	-	23,476 15	-
42	Mount Tom,	-	845 18	-	-	-	937 44	-
43	Nahant & Lynn,	-	23,742 50	-	-	125 00	29,580 50	-
44	Natick & Cohituate,	-	14,158 64	-	-	277 80	13,894 35	-
45	New Bedford & Onset,	-	57,796 20	-	17,743 24	42,675 00	49,933 76 ³	-
46	Newton,	-	55,037 82	-	-	4,536 70	52,864 90	-
47	Newton & Boston,	30,358 77	-	208,631 39	-	3,291 60	242,281 76	-
48	Newtonville & Watertown,	350 42	2,374 28	-	-	51 25	1,972 61	-
49	Norfolk & Bristol,	-	-	69,601 40	-	-	-	61,274 88
50	Northampton,	8,633 81	23,756 32	-	-	-	15,122 51	-
51	North End,	-	-	18,818 90	-	-	-	18,742 81
52	Norton & Taunton,	6,916 36	-	29,416 03	-	3,537 89	-	39,870 28
53	Norwood, Canton & Sharon,	2,389 41	-	59,018 44	-	-	-	61,407 85
54	Old Colony,	-	64,935 93	-	-	80,761 36	79,957 25	-
55	Pittsfield Electric,	-	53,827 55	-	-	-	55,365 81	-

³ Includes \$17,675 premium on sale of bonds.¹ Includes \$2,036,900 net premium on sales of capital stock and bonds.² Includes \$78,750 premium on sale of capital stock.

Tabulated Statements from Returns of Street Railway Companies — Continued.

RAILWAY COMPANIES.		EXHIBIT FOR THE YEAR ENDING SEPTEMBER 30, 1907 — Concluded.						
		64. — Deficit for the Year.	65. — Surplus Sept. 30, 1906.	66. — Deficit Sept. 30, 1906.	67. — Credits during Year.	68. — Debits during Year.	69. — Surplus Sept. 30, 1907.	70. — Deficit Sept. 30, 1907.
56	Plymouth, Carver & Wareham, . . .	—	—	—	—	—	—	—
57	Plymouth & Sandwich, . . .	—	\$5,879 11	—	—	—	\$6,979 29	—
58	Providence & Fall River, . . .	—	—	\$18,787 52	—	\$2,163 11	—	\$20,939 37
59	Shelburne Falls & Colrain, . . .	—	11,901 06	—	—	—	12,331 82	—
60	Somerville, . . .	—	—	—	—	—	—	—
61	{South Middlesex (receiver), . . .	—	—	—	—	14,757 00	—	—
62	{Middlesex & Boston, . . .	—	—	—	—	477 35	615 80	—
63	Springfield, . . .	—	150,016 23	—	\$212,748 21	203 02	367,530 04	—
64	Springfield & Eastern, . . .	\$36 50	14,634 35	—	—	21 70	14,576 15	—
65	Taunton & Pawtucket, . . .	5,185 03	—	2,900 30	—	62 19	—	8,147 52
	Templeton, . . .	11,669 31	—	58,001 68	—	—	—	69,670 99
66	Union, . . .	—	184,788 93	—	836 04	5,870 68	209,605 56	—
67	Uxbridge & Blackstone, . . .	—	9,612 86	—	—	178 52	10,238 06	—
68	Waltham, . . .	—	—	335 56	2 85	3 49	—	154 45
69	Ware & Brookfield, . . .	7,993 94	—	4,263 40	—	—	—	12,257 34
70	Warren, Brookfield & Spencer, . . .	—	32,114 29	—	—	2,000 00	33,583 06	—
71	Webster & Dudley, . . .	—	—	22,860 08	—	—	—	22,860 08
	{Webster & Dudley and Worcester & Webster (lessee), . . .	1,303 97	—	—	1,303 97	—	—	—
72	Westborough & Hopkinton, . . .	—	—	4,167 91	—	1 70	—	3,629 13
73	West End, . . .	—	861,085 43	—	288,722 90	—	1,150,093 38	—
74	Western Massachusetts, . . .	—	4,630 31	—	10,537 70	5,835 67	24,598 17	—
75	Winnisimmet, . . .	—	124 85	—	—	—	124 85	—

76	Worcester & Blackstone Valley, .	-	35,078 25	-	3,710 04	-	164,112 79	57,807 29	-
77	Worcester Consolidated, .	-	375,548 10	-	373 96	-	3,684 64	212,592 17	-
78	Worcester & Holden, .	1,102 13	11,852 45	-	-	-	-	7,065 68	-
79	Worcester & Northern, .	-	-	-	-	-	-	-	-
80	Worcester & Providence, .	-	-	-	-	-	-	-	-
81	Worcester & Shrewsbury R.R., .	-	64,693 03	-	-	-	-	64,693 29	-
82	Worcester & Shrewsbury Street Ry., .	-	22 05	-	-	-	-	22 05	-
83	Worcester & Southbridge, .	-	-	145,528 01	24,183 10	-	-	-	77,395 49
84	Worcester & Webster, .	-	-	72,672 58	-	-	-	-	72,672 58
85	Woronoco, .	-	12,222 34	-	-	-	17,535 56	-	-
	Totals,	\$145,739 67	\$5,571,750 66	\$910,293 65	\$612,625 00	\$841,222 53	\$6,013,500 29	\$976,844 00	

Tabulated Statements from Returns of Street Railway Companies — Continued.

RAILWAY COMPANIES.		DESCRIPTION OF RAILWAY (LENGTH IN MILES).						
		71.—Railway Line Owned.	72.—Second Main Track Owned.	73.—Total Main Track Owned.	74.—Sidings, Switches, etc., Owned.	75.—Total Track Owned.	76.—Leased Main Track and Trackage Rights.	77.—Total Main Track Operated.
1	Amesbury & Hampton,	8.342	—	8.342	.409	8.751	—	8.342
2	Amherst & Sunderland,*	15.711	—	15.711	.963	16.674	—	15.711
3	Athol & Orange,	6.864	—	6.864	.270	7.134	—	6.864
4	Berkshire,	68.441	—	68.441	2.495	70.936	—	68.441
5	Blue Hill,	15.365	2.947	18.312	1.284	19.596	.180	18.492
6	Boston & Chelsea,	4.116	—	4.116	.038	4.154	—	—
7	Boston Elevated,	10.887	10.341	21.228	8.560	29.788	392.823	407.508
8	Boston & Northern,	387.681	72.272	459.953	19.379	479.332	53.007	512.960
9	Boston & Revere Electric,	1.856	1.856	3.712	.100	3.812	—	—
10	Boston & Worcester,	47.338	28.711	76.049	2.520	78.569	.524	76.573
11	Bristol & Norfolk,	6.195	—	6.195	.123	6.318	.378	6.573
12	Brockton & Plymouth,	22.091	—	22.091	1.964	24.055 *	—	22.091
13	Citizens' Electric,	16.863	—	16.863	.983	17.846	.568	17.431
14	Connecticut Valley,	45.412	—	45.412	1.892	47.304	—	45.412
15	Concord, Maynard & Hudson,	14.215	—	14.215	.600	14.815	.350	14.565
16	Conway Electric,	5.910	—	5.910	.520	6.430	—	5.910
17	Cottage City & Edgartown Traction,	5.350	—	5.350	.500	5.850	1.100	6.450
18	Dartmouth & Westport,	9.200	8.652	17.852	.204	18.056	12.174	30.026
19	Dedham & Franklin,	9.079	—	9.079	.371	9.450	—	9.079
20	East Middlesex,	16.009	2.582	18.591	.803	19.394	—	—
21	East Taunton,	10.524	—	10.524	.176	10.700	.724	11.248
22	Fitchburg & Leominster,	33.686	5.345	39.031	1.669	40.700	—	39.031
23	Gardner, Westminster & Fitchburg,	15.524	—	15.524	.760	16.284	—	15.524
24	Hampshire,*	4.340	—	4.340	.230	4.570	—	—
25	Hartford & Worcester,	1.666	—	1.666	.057	1.723	—	—

26	Haverhill & Amesbury,	25.900	—	25.900	1.498	27.398	1.026	26.926
27	Haverhill & Plaistow,	2.682	—	2.682	.076	2.758	—	2.682
28	Haverhill & Southern New Hampshire,	7.892	—	7.892	.296	8.188	.050	7.942
29	Holyoke,	55.701	7.585	63.286	4.447	67.733	.900	64.186
30	Interstate Consolidated,	21.580	—	21.580	1.200	22.780	—	21.580
31	Lawrence & Methuen,	12.518	—	12.518	.437	12.955	.225	12.743
32	Lexington & Boston,	27.205	2.460	29.665	2.691	32.356	.745	30.037
33	Linwood,	—	—	—	—	—	1.741 ¹	1.741 ¹
34	Lowell, Acton & Maynard,	2.000	—	2.000	—	2.000	—	1.963
35	Lowell & Fitchburg,	17.680	—	17.680	.595	18.275	—	17.680
36	Lowell & Pelham,	3.167	—	3.167	.151	3.318	—	3.167
37	Marlborough & Westborough,	13.510	—	13.510	.350	13.860	—	13.510
38	Martha's Vineyard,	1.100	—	1.100	—	1.100	—	—
39	Medfield & Medway,	11.009	—	11.009	.241	11.250	—	11.009
40	Milford, Attleborough & Woonsocket,	30.000	—	30.000	.520	30.520	—	30.000
41	Milford & Uxbridge,	33.689	.991	34.680	1.226	35.906	.025	34.705
42	Mount Tom,	.900	—	.900	.100	1.000	—	—
43	Nahant & Lynn,	3.662	2.353	6.015	.021	6.036	—	6.015
44	Natick & Cohituate,	16.991	.939	17.930	.828	18.758	—	17.930
45	New Bedford & Onset,	37.587	3.654	41.241	2.878	44.119	—	41.241
46	Newton,	26.475	8.884	35.359	2.371	37.730	6.732	42.091
47	Newton & Boston,	8.983	—	8.983	.765	9.748	5.618	14.601
48	Newtonville & Watertown,	4.308	—	4.308	.357	4.665	—	—
49	Norfolk & Bristol,	21.028	—	21.028	.478	21.506	.293	21.321
50	Northampton,	24.369	—	24.369	2.209	26.578	—	24.369
51	North End,	4.995	—	4.995	.135	5.130	—	—
52	Norton & Taunton,	29.220	—	29.220	.853	30.073	.407	29.627
53	Norwood, Canton & Sharon,	6.073	—	6.073	.209	6.282	—	6.042
54	Old Colony,	314.162	45.267	359.429	17.855	377.284	19.294	352.709
55	Pittsfield Electric,	27.632	.995	28.627	.738	29.365	—	28.627

¹ Owned by private parties.

Tabulated Statements from Returns of Street Railway Companies — Continued.

	RAILWAY COMPANIES.	DESCRIPTION OF RAILWAY (LENGTH IN MILES) — Concluded.					
		71. — Railway Line Owned.	72. — Second Main Track Owned.	73. — Total Main Track Owned.	74. — Sidings, Switches, etc., Owned.	75. — Total Track Owned.	76. — Leased Main Track and Trackage Rights.
							77. — Total Main Track Operated.
56	Plymouth, Carver & Wareham,	—	—	—	—	—	—
57	Plymouth & Sandwich,	6.146	—	6.146	.213	6.359	6.359
58	Providence & Fall River,	11.983	—	11.983	.607	12.590	11.983
59	Shelburne Falls & Colrain,	6.530	—	6.530	.480	7.010	6.530
60	Somerville,	6.356	1.424	7.780	.253	8.033	—
61	(South Middlesex (receiver),	—	—	—	—	—	—
62	Middlesex & Boston,	12.956	1.725	14.681	1.217	15.898	14.850
63	Springfield,	69.261	23.196	92.457	7.071	99.528	132.573
64	Springfield & Eastern,	40.116	—	40.116	2.699	42.815	—
65	Taunton & Pawtucket,	15.978	.470	16.448	1.175	17.623	17.612
66	Templeton,	17.873	—	17.873	—	17.873	17.873
67	Union,	25.676	4.374	30.050	1.826	31.876	30.217
68	Uxbridge & Blackstone,	9.602	—	9.602	.290	9.892	9.602
69	Waltham,	5.594	—	5.594	.052	5.646	—
70	Ware & Brookfield,	11.710	—	11.710	.410	12.120	11.710
71	Warren, Brookfield & Spencer,	19.607	—	19.607	.491	20.098	19.607
72	Webster & Dudley,	5.650	—	5.650	.187	5.837	—
73	Webster & Dudley and Worcester & Webster (lessee),	—	—	—	—	—	22.381 ¹
74	Westborough & Hopkinton,	182.740	160.228	342.968	.062	6.431	6.369
75	West End,	25.415	.342	25.757	1.291	27.048	25.757
76	Winnisimmet,	1.043	1.016	2.059	.128	2.187	—

76	Worcester & Blackstone Valley, .	15,740	-	15,740	.620	16,360	1,500	17,240
77	Worcester Consolidated, .	128,319	27,255	155,574	2,790	158,364	8,610	164,184
78	Worcester & Holden, .	9,579	-	9,579	.788	10,367	2,130	11,709
79	Worcester & Northern, .	-	-	-	-	-	-	-
80	Worcester & Providence, .	-	-	-	-	-	-	-
81	Worcester & Shrewsbury R.R., .	2,700	-	2,700	.550	3,250	-	-
82	Worcester & Shrewsbury Street Ry., .	.425	-	.425	.034	.459	-	-
83	Worcester & Southbridge, .	25,960	1,760	27,720	2,990	30,710	26,407	54,127
84	Worcester & Webster, .	15,161	-	15,161	.644	15,805	-	-
85	Woronoco,* .	15,793	.342	16,135	.793	16,928	-	16,135
	Totals, ² .	2,233,121	427,624	2,660,745	157,130	2,817,875	579,147	2,745,266

¹ Not included in totals, leases having been transferred to the Worcester and Southbridge.

² Not including the companies marked *, these companies having been consolidated during the year.

Tabulated Statements from Returns of Street Railway Companies — Continued.

	RAILWAY COMPANIES.	DESCRIPTION OF EQUIPMENT.						
		78.—Box Passenger Cars.	79.—Open Passenger Cars.	80.—Total Passenger Cars.	81.—Other Service Cars.	82.—Snow Plows.	83.—Other Vehicles.	84.—Electric Motors.
1	Amesbury & Hampton,	2	9	11	—	1	—	22
2	Amherst & Sunderland,*	5	6	11	6	1	—	32
3	Athol & Orange,	8	5	13	—	1	1	28
4	Berkshire,	37	43	80	5	6	9	254
5	Blue Hill,	12	16	28	12	3	1	80
6	Boston & Chelsea,	—	—	—	—	—	—	—
7	Boston Elevated,	1,893	1,509	3,402	100	305	1,178	5,137
8	Boston & Northern,	569	630	1,199	56	177	193	2,811
9	Boston & Revere Electric,	—	—	—	—	—	—	—
10	Boston & Worcester,	46	31	77	6	11	4	239
11	Bristol & Norfolk,	2	3	5	—	1	1	10
12	Brockton & Plymouth,	10	15	25	3	3	3	69
13	Citizens' Electric,	12	18	30	2	3	5	65
14	Connecticut Valley,	19	22	41	10	5	6	126
15	Concord, Maynard & Hudson,	9	7	16	1	2	1	70
16	Conway Electric,	3	2	5	10	1	—	10
17	Cottage City & Edgartown Traction,	—	7	7	2	—	1	8
18	Dartmouth & Westport,	11	12	23	11	4	1	170
19	Dedham & Franklin,	10	3	13	1	2	2	12
20	East Middlesex,	—	—	—	—	—	—	—
21	East Taunton,	3	4	7	1	2	1	28
22	Fitchburg & Leominster,	28	26	54	5	5	25	129
23	Gardner, Westminster & Fitchburg,	9	12	21	3	2	1	46
24	Hampshire,*	—	—	—	—	—	—	—
25	Hartford & Worcester,	—	—	—	—	—	—	—

26	Haverhill & Amesbury,	19	36	55	3	7	8	70
27	Haverhill & Plaistow,	—	—	—	—	—	—	—
28	Haverhill & Southern New Hampshire,	5	6	11	—	—	—	44
29	Holyoke,	46	73	119	26	8	8	265
30	Interstate Consolidated,	—	—	—	—	—	—	—
31	Lawrence & Methuen,	5	7	12	—	2	—	48
32	Lexington & Boston,	23	38	61	2	7	8	170
33	Linwood,	4	—	4	—	—	—	12
34	Lowell, Acton & Maynard,	—	—	—	—	—	—	—
35	Lowell & Fitchburg,	8	—	8	—	1	—	32
36	Lowell & Pelham,	4	5	9	—	1	—	36
37	Marlborough & Westborough,	6	6	12	1	2	—	24
38	Martha's Vineyard,	—	—	—	—	—	—	—
39	Medfield & Medway,	4	3	7	—	2	—	10
40	Milford, Attleborough & Woonsocket,	12	16	28	—	3	1	64
41	Milford & Uxbridge,	23	20	43	3	8	3	118
42	Mount Tom,	—	—	—	—	—	—	—
43	Nahant & Lynn,	3	12	15	1	1	—	28
44	Natick & Cohituate,	18	21	39	2	4	4	94
45	New Bedford & Onset,	12	24	36	3	4	—	104
46	Newton,	61	79	140	4	9	17	289
47	Newton & Boston,	7	10	17	1	3	7	31
48	Newtonville & Watertown,	—	—	—	—	—	—	—
49	Norfolk & Bristol,	11	12	23	2	2	1	40
50	Northampton,	21	23	44	9	4	9	112
51	North End,	—	—	—	—	—	—	—
52	Norton & Taunton,	10	8	18	3	3	—	54
53	Norwood, Canton & Sharon,	4	3	7	—	1	—	16
54	Old Colony,	329	416	745	78	80	64	1,759
55	Pittsfield Electric,	16	20	36	1	3	1	110

Tabulated Statements from Returns of Street Railway Companies — Continued.

	RAILWAY COMPANIES.	DESCRIPTION OF EQUIPMENT — Concluded.						S1. — Electric Motors.
		78. — Box Passenger Cars.	79. — Open Passenger Cars.	80. — Total Passenger Cars.	S1. — Other Service Cars.	S2. — Snow Plows.	S3. — Other Vehicles.	
56	Plymouth, Carver & Wareham, . . .	—	—	—	—	—	—	—
57	Plymouth & Sandwich, . . .	2	2	4	—	—	—	8
58	Providence & Fall River, . . .	9	10	19	1	3	1	60
59	Shelburne Falls & Colrain, . . .	3	2	5	8	1	—	10
60	Somerville, . . .	—	—	—	—	—	—	—
61	(South Middlesex (receiver), . . .	—	—	—	—	—	—	—
62	Middlesex & Boston, . . .	9	5	14	2	3	2	52
63	Springfield, . . .	137	145	282	24	38	17	898
64	Springfield & Eastern, . . .	—	—	—	—	—	—	—
65	Taunton & Fawtucket, . . .	6	9	15	—	1	—	42
66	Templeton, . . .	7	8	15	2	2	—	30
67	Union, . . .	54	66	120	10	9	13	197
68	Uxbridge & Blackstone, . . .	4	6	10	1	1	—	12
69	Waltham, . . .	—	4	4	—	—	—	6
70	Ware & Brookfield, . . .	4	8	12	—	—	2	28
71	Warren, Brookfield & Spencer, . . .	7	10	17	2	2	1	32
72	Webster & Dudley, . . .	—	—	—	—	—	—	—
73	Webster & Dudley and Worcester & Webster (lessee), . . .	9	14	23	2	3	2	78
74	Westborough & Hopkinton, . . .	—	—	—	—	—	—	—
75	West End, . . .	—	—	—	—	—	—	—
76	Western Massachusetts, . . .	15	24	39	4	4	3	102
77	Winnisimmet, . . .	—	—	—	—	—	—	—

76	Worcester & Blackstone Valley, .	10	8	18	1	3	1	75
77	Worcester Consolidated, .	147	179	326	14	37	47	886
78	Worcester & Holden, .	3	4	7	3	1	-	28
79	Worcester & Northern, .	-	-	-	-	-	-	-
80	Worcester & Providence, .	-	-	-	-	-	-	-
81	Worcester & Shrewsbury R.R., .	-	-	-	-	-	-	-
82	Worcester & Shrewsbury Street Ry., .	-	-	-	-	-	-	-
83	Worcester & Southbridge, .	27	36	63	3	6	-	238
84	Worcester & Webster, .	-	-	-	-	-	-	-
85	Woronoco,* .	12	19	31	4	3	3	70
	Totals, ¹	3,787	3,752	7,539	444	803	1,653	15,626

¹ Not including the companies marked *, these companies having been consolidated during the year.

Tabulated Statements from Returns of Street Railway Companies — Continued.

	RAILWAY COMPANIES.	VOLUME OF TRAFFIC.				STOCKHOLDERS.			91. — Stock held in Massachusetts.
		85. — Total Passengers Carried.	86. — Average Number per Mile of Main Track Operated.	87. — Car Miles Run.	88. — Number of Employees.	89. — Total Number.	90. — In Massachusetts.		
1	Amesbury & Hampton,	529,708	63,499	144,600	16	6	5	\$500 00	
2	Amherst & Sunderland,*	469,409	29,877	209,264	30	17	16	119,800 00	
3	Athol & Orange,	941,140	137,112	144,838	16	13	12	73,500 00	
4	Berkshire,	8,053,530	117,671	1,808,597	298	19	15	1,647,700 00	
5	Blue Hill,	1,674,355	90,545	386,228	60	59	57	293,000 00	
6	Boston & Chelsea,	—	—	—	—	102	74	95,950 00	
7	Boston Elevated,	271,084,815	665,225	51,830,188	8,483	3,438	3,009	11,434,700 00	
8	Boston & Northern,	92,878,973	181,065	17,634,375	2,679	23	22	10,569,500 00	
9	Boston & Revere Electric,	—	—	—	—	16	13	35,200 00	
10	Boston & Worcester,	10,571,066	138,052	1,820,985	230	16	15	1,724,900 00	
11	Bristol & Norfolk,	241,646	36,764	69,917	8	26	24	89,900 00	
12	Brockton & Plymouth,	2,251,156	101,904	468,831	58	62	59	290,000 00	
13	Citizens' Electric,	2,255,763	129,411	340,048	67	16	15	233,900 00	
14	Connecticut Valley,	3,675,334	80,934	863,799	115	214	198	378,500 00	
15	Concord, Maynard & Hudson,	1,146,088	78,687	280,072	30	94	92	173,500 00	
16	Conway Electric,	58,769	9,944	30,424	5	97	93	94,850 00	
17	Cottage City & Edgartown Traction,	104,667	16,228	14,992	8	10	10	60,000 00	
18	Dartmouth & Westport,	3,749,563	124,877	503,509	65	96	88	151,200 00	
19	Dedham & Franklin,	470,541	51,827	135,316	16	8	8	75,000 00	
20	East Middlesex,	—	—	—	—	117	105	264,800 00	
21	East Taunton,	926,115	82,336	156,975	15	61	61	110,000 00	
22	Fitchburg & Leominster,	5,263,564	134,858	1,024,931	110	124	118	440,000 00	
23	Gardner, Westminster & Fitchburg,	1,278,849	82,378	257,601	45	71	70	184,000 00	
24	Hampshire,*	—	—	—	—	23	23	60,000 00	
25	Hartford & Worcester,	—	—	—	—	9	9	158,000 00	

26	Haverhill & Amesbury, . . .	2,531,122	94,003	549,302	70	18	17	145,000 00
27	Haverhill & Plaistow, . . .	408,731	152,398	69,300	6	6	5	500 00
28	Haverhill & Southern New Hampshire, . . .	945,467	119,046	239,000	17	6	5	500 00
29	Holyoke, . . .	8,651,790	134,792	1,758,538	283	242	200	860,400 00
30	Interstate Consolidated, . . .	3,466,647	160,642	599,430	123	5	1	55,000 00
31	Lawrence & Methuen, . . .	1,604,755	125,933	362,300	28	6	5	500 00
32	Lexington & Boston, . . .	2,882,885	95,978	695,817	91	9	9	525,000 00
33	Linwood, . . .	303,810	174,503	41,575	6	17	16	11,700 00
34	Lowell, Acton & Maynard, . . .	131,913	67,200	45,122	6	20	20	20,000 00
35	Lowell & Fitchburg, . . .	782,012	50,227	188,669	22	5	2	200 00
36	Lowell & Pelham, . . .	352,827	111,406	76,300	8	7	6	600 00
37	Marlborough & Westborough, . . .	534,964	39,597	183,463	29	14	13	150,300 00
38	Martha's Vineyard, . . .	—	—	—	—	6	6	8,000 00
39	Medfield & Medway, . . .	451,898	41,048	151,300	18	9	9	100,000 00
40	Milford, Attleborough & Woonsocket, . . .	1,869,979	62,332	408,108	62	10	3	314,300 00
41	Milford & Uxbridge, . . .	3,495,621	100,724	734,772	100	119	17	85,000 00
42	Mount Tom, . . .	—	—	—	—	107	95	83,600 00
43	Nahant & Lynn, . . .	631,495	104,986	117,977	30	38	38	100,000 00
44	Natick & Cohituate, . . .	1,990,992	111,042	527,988	64	10	10	100,000 00
45	New Bedford & Onset, . . .	1,844,295	44,720	458,648	86	189	183	492,400 00
46	Newton, . . .	7,625,394	181,164	1,538,823	219	9	9	722,000 00
47	Newton & Boston, . . .	1,682,098	115,204	454,534	61	9	9	200,000 00
48	Newtonville & Watertown, . . .	—	—	—	—	19	19	50,000 00
49	Norfolk & Bristol, . . .	1,444,867	67,767	446,699	55	16	15	194,000 00
50	Northampton, . . .	3,479,211	142,772	808,062	105	198	159	245,900 00
51	North End, . . .	—	—	—	—	29	28	109,900 00
52	Norton & Taunton, . . .	1,164,155	39,327	358,410	48	73	72	257,000 00
53	Norwood, Canton & Sharon, . . .	205,520	34,015	69,249	10	12	12	62,500 00
54	Old Colony, . . .	55,675,154	157,848	10,284,381	1,648	30	28	7,369,600 00
55	Pittsfield Electric, . . .	4,039,159	141,096	848,619	104	57	53	299,000 00

Tabulated Statements from Returns of Street Railway Companies — Continued.

	RAILWAY COMPANIES.	VOLUME OF TRAFFIC—Concluded.				STOCKHOLDERS—Concluded.			91.—Stock held in Massachusetts.
		85.—Total Passengers Carried.	86.—Average Number per Mile of Main Track Operated.	87.—Car Miles Run.	88.—Number of Employees.	89.—Total Number.	90.—In Massachusetts.		
56	Plymouth, Carver & Wareham,	—	—	—	—	—	—	—	
57	Plymouth & Sandwich,	92,538	15,056	40,476	6	31	26	\$28,400 00	
58	Providence & Fall River,	1,143,795	95,452	254,155	34	34	31	154,700 00	
59	Shelburne Falls & Colrain,	101,275	15,509	62,050	12	48	40	14,600 00	
60	Somerville,	—	—	—	—	5	5	153,000 00	
61	{South Middlesex (receiver),	1,531,520	103,133	331,794	—	—	—	—	
62	{Middlesex & Boston,	263,163	17,721	49,320	43	9	9	300,000 00	
63	Springfield,	25,862,240	195,079	5,719,409	756	20	13	1,112,700 00	
64	Springfield & Eastern,	—	—	—	—	34	25	248,700 00	
65	Taunton & Pawtucket,	1,045,082	59,339	270,446	38	8	5	50,200 00	
66	Templeton,	788,757	44,131	220,637	29	80	80	75,000 00	
67	Union,	8,806,096	291,428	1,627,866	288	181	166	511,200 00	
68	Uxbridge & Blackstone,	612,061	63,743	139,601	21	8	6	119,800 00	
69	Waltham,	—	—	—	—	9	9	100,000 00	
70	Ware & Brookfield,	441,111	37,669	152,192	27	8	8	100,000 00	
	Warren, Brookfield & Spencer,	1,035,828	52,830	370,292	36	17	15	145,300 00	
71	{Webster & Dudley,	—	—	—	—	10	3	300 00	
	{Webster & Dudley and Worcester & Webster (lessee),	1,047,792	46,816	166,885	58	—	—	—	
72	Westborough & Hopkinton,	272,773	42,828	79,015	5	9	9	40,000 00	
73	West End,	—	—	—	—	8,393	7,352	14,897,950 00	
74	Western Massachusetts,	1,592,296	61,819	368,610	71	8	6	549,800 00	
75	Winnisimmet,	—	—	—	—	35	33	49,800 00	

76	Worcester & Blackstone Valley, . .	1,505,797	87,343	351,454	41	8	* 8	200,000 00
77	Worcester Consolidated, . .	32,757,068	199,514	5,981,380	918	24	22	3,549,800 00
78	Worcester & Holden, . .	859,865	73,437	151,370	18	32	32	150,000 00
79	Worcester & Northern, . .	—	—	—	—	26	26	15,000 00
80	Worcester & Providence, . .	—	—	—	—	18	17	15,050 36
81	Worcester & Shrewsbury R.R., . .	—	—	—	—	6	6	36,700 00
82	Worcester & Shrewsbury Street Ry., .	—	—	—	—	6	6	20,000 00
83	Worcester & Southbridge, . .	4,226,859	78,091	949,470	157	10	10	750,000 00
84	Worcester & Webster, . .	—	—	—	—	8	4	400 00
85	Woronoco, * . .	888,088	55,041	290,905	56	11	7	248,700 00
	Totals, ¹	600,695,816	217,042	117,719,203	18,181	15,077	13,208	\$64,529,900 36

¹ Not including in columns 88, 89, 90 and 91 the companies marked *, these companies having been consolidated during the year.

Tabulated Statements from Returns of Street Railway Companies — Continued.

RAILWAY COMPANIES.		ACCIDENTS DURING THE YEAR ENDING SEPTEMBER 30, 1907.						
		92.—To Pas- sengers.	93.—To Em- ployees.	94.—To Other Persons.	95.—Fatal.	96.—Not Fatal.	97.—Total.	98.—Total during Preceding Year.
1	Amesbury & Hampton,	3	—	2	1	4	5	—
2	Amherst & Sunderland,	3	—	—	1	2	3	—
3	Athol & Orange,	—	—	—	—	—	—	1
4	Berkshire,	28	1	—	3	26	29	39
5	Blue Hill,	10	—	1	—	11	11	12
6	Boston & Chelsea,	—	—	—	—	—	—	—
7	Boston Elevated,	2,699	115	992	29	3,777	3,806	3,743
8	Boston & Northern,	760	49	239	23	1,025	1,048	1,129
9	Boston & Revere Electric,	—	—	—	—	—	—	—
10	Boston & Worcester,	32	—	7	1	38	39	35
11	Bristol & Norfolk,	—	—	—	—	—	—	—
12	Brookton & Plymouth,	7	1	1	—	9	9	3
13	Citizens' Electric,	8	—	1	—	9	9	5
14	Connecticut Valley,	16	2	10	1	27	28	12
15	Concord, Maynard & Hudson,	3	—	—	—	3	3	1
16	Conway Electric,	—	—	—	—	—	—	—
17	Cottage City & Edgartown Traction,	—	—	—	—	—	—	—
18	Dartmouth & Westport,	8	1	4	—	13	13	9
19	Dedham & Franklin,	1	—	—	—	1	1	3
20	East Middlesex,	—	—	—	—	—	—	—
21	East Taunton,	1	—	1	2	—	2	—
22	Fitchburg & Leominster,	22	3	12	1	36	37	89
23	Gardner, Westminster & Fitchburg,	10	—	3	—	13	13	11
24	Hampshire,	—	—	—	—	—	—	—
25	Hartford & Worcester,	—	—	—	—	—	—	—

26	Haverhill & Amesbury,	12	-	-	-	12	5
27	Haverhill & Plaistow,	1	-	-	-	1	2
28	Haverhill & Southern New Hampshire,	1	-	-	-	1	5
29	Holyoke,	37	10	1	1	46	45
30	Interstate Consolidated,	46	2	1	1	50	6
31	Lawrence & Methuen,	20	6	1	1	28	15
32	Lexington & Boston,	9	-	-	-	13	60
33	Linwood,	-	-	-	-	-	1
34	Lowell, Acton & Maynard,	-	-	-	-	-	-
35	Lowell & Fitchburg,	-	-	-	-	-	-
36	Lowell & Pelham,	-	-	-	-	-	1
37	Marlborough & Westborough,	3	1	-	-	4	6
38	Martha's Vineyard,	-	-	-	-	-	-
39	Medfield & Medway,	1	-	-	-	1	3
40	Milford, Attleborough & Woonsocket,	1	1	-	-	2	16
41	Milford & Uxbridge,	11	1	-	-	12	20
42	Mount Tom,	-	-	-	-	-	-
43	Nahant & Lynn,	-	-	-	-	-	2
44	Natick & Cohituate,	3	-	-	-	8	18
45	New Bedford & Onset,	4	3	2	2	5	4
46	Newton,	20	-	2	2	27	97
47	Newton & Boston,	9	-	1	1	15	23
48	Newtonville & Watertown,	-	-	-	-	-	-
49	Norfolk & Bristol,	-	-	-	-	-	-
50	Northampton,	19	2	-	-	25	13
51	North End,	-	-	-	-	-	-
52	Norton & Taunton,	3	1	-	-	5	2
53	Norwood, Canton & Sharon,	-	-	-	-	-	-
54	Old Colony,	568	140	7	7	766	695
55	Pittsfield Electric,	15	1	2	2	17	6

Tabulated Statements from Returns of Street Railway Companies — Continued.

RAILWAY COMPANIES.		ACCIDENTS DURING THE YEAR ENDING SEPTEMBER 30, 1907 — Concluded.					
		92. — To Pas- sengers.	93. — To Em- ployees.	94. — To Other Persons.	95. — Fatal.	96. — Not Fatal.	97. — Total.
							98. — Total during Preceding Year.
56	Plymouth, Carver & Wareham, . . .	—	—	—	—	—	—
57	Plymouth & Sandwich, . . .	—	—	—	—	—	—
58	Providence & Fall River, . . .	1	2	—	—	3	3
59	Shelburne Falls & Colrain, . . .	1	1	—	—	2	—
60	Somerville, . . .	—	—	—	—	—	—
61	{ South Middlesex (receiver), . . .	13	—	—	—	13	—
62	{ Middlesex & Boston, . . .	3	2	—	—	5	29
63	Springfield, . . .	103	11	66	7	173	229
64	Springfield & Eastern, . . .	—	—	—	—	—	—
65	Taunton & Pawtucket, . . .	4	—	—	—	4	2
66	Templeton, . . .	16	—	—	—	16	1
67	Union, . . .	24	6	13	3	40	25
68	Uxbridge & Blackstone, . . .	—	—	1	1	—	—
69	Waltham, . . .	—	—	—	—	—	—
70	Ware & Brookfield, . . .	—	—	—	—	—	—
71	Warren, Brookfield & Spencer, . . .	10	1	—	—	11	7
72	{ Webster & Dudley, . . .	—	—	—	—	—	—
73	{ Webster & Dudley and Worcester & Webster (lessee), . . .	3	—	1	—	4	17
74	Westborough & Hopkinton, . . .	1	—	—	—	1	7
75	West End, . . .	—	—	—	—	—	—
76	Western Massachusetts, . . .	4	1	5	—	10	—
77	Winnisimmet, . . .	—	—	—	—	—	—

76	Worcester & Blackstone Valley, .	5	—	—	—	—	—	5	—	22
77	Worcester Consolidated, .	260	18	121	—	—	—	399	—	420
78	Worcester & Holden, .	—	—	—	—	—	—	—	—	6
79	Worcester & Northern, .	—	—	—	—	—	—	—	—	—
80	Worcester & Providence, .	—	—	—	—	—	—	—	—	—
81	Worcester & Shrewsbury R.R., .	—	—	—	—	—	—	—	—	—
82	Worcester & Shrewsbury Street Ry., .	—	—	—	—	—	—	—	—	—
83	Worcester & Southbridge, .	34	7	5	—	—	—	46	—	15
84	Worcester & Webster, .	—	—	—	—	—	—	—	—	—
85	Woronoco, .	3	—	—	—	—	—	3	—	—
	Totals,	4,879	321	1,653	99	6,754	6,853	6,925		

4679 068

ACME
BOOKBINDING CO., INC.

APR 6 1991

100 CAMBRIDGE STREET
CHARLESTOWN, MASS

